



**College of
Medicine**

UNIVERSITY OF CENTRAL FLORIDA



Community of Practice Portfolio

Portfolio Advisor Manual

2018-19



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Welcome to Community of Practice 2!

Thank you for your support to Community of Practice and confirming your participation as a Portfolio Advisor for the 2018-19 academic year!

We are looking forward to another successful year, giving our students the opportunity to work with you and develop their clinical reasoning and documentation skills.

Here is a summary of important COP-2 changes to help you become aware of our M2s' experiences throughout Community of Practice this year:

- 1. COP-2 Timeframe:** COP-2 will consist of only four (4) required sessions this year. These sessions are expected to occur once a month from August through November, leaving December open as a “cushion” month.
- 2. COP-2 Preceptors:** Most M2 students are staying with their COP-1 preceptor through their second-year experience. This was done in an effort to provide a true longitudinal clinical experience between their 1st and 2nd years.
- 3. Formative H&Ps:** Students will submit three (3) formative H&Ps for feedback through the LiveText portfolio. Similar to previous years, advisors are to provide feedback no later than 2 weeks after each student's submission.
- 4. The goal of H&P writing for M2 students is to allow them to synthesize and organize information gathered and to develop their critical reasoning.** We ask that you emphasize this in the writer's workshop and your formative feedback, going beyond the history and physical and focusing on the summary statement, problem list and assessment and plan.

Please know that your time and commitment to our educational program are always deeply valued and appreciated.

Best regards,



Analía Castiglioni, M.D.
COP-2 Co-Director



Caridad Hernandez, M.D.
COP-2 Co-Director

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Introduction

Community of Practice: An Overview

The Community of Practice (COP) program, a key component of the Practice of Medicine module, consists of a longitudinal clinical experience that provides students with an authentic clinical context to promote deeper learning, professional identity formation, and adoption of the values of the profession. This program allows students to work one-on-one with local Central Florida practicing physicians (commonly referred to as preceptors). These early, immersive, and participatory clinical experiences help students to contextualize foundational knowledge and hone their clinical skills while working with real patients under the supervision of a practicing physician. Students also gain an understanding of the complexities of physicians' work and the distributive nature of learning and knowledge.

During the second year of Community of Practice (COP-2), students are scheduled to rotate with preceptors in various clinical settings where patients receive care for complex and/or acute medical conditions (e.g., inpatient ward, emergency room, urgent care, nursing home, etc.). The goals are for students to continue to learn and practice their clinical and communication skills, obtain a deeper sense of the complex interaction of medical problems, and appreciate the often-complex biological, psychological, social, and/or physical dimensions of patient care.

Students in COP-2 are assigned a preceptor for 4 four-hour sessions through December. Each session will have specific learning objectives and requirements for the students, including the completion of assignments through an electronic instrument known as an electronic portfolio (commonly referred to as *e-portfolio*).

Community of Practice-2 Portfolio

The COP-2 e-portfolio is a tool for 2nd-year students to chronicle their learning needs, form learning goals and plans, and record their progress towards achieving these as well as towards satisfying each COP-2 assignment. It provides a platform for students to reflect on their learning activities, key events and experiences, as well as assembling a collection of work that demonstrates their achievements of competency goals.

Building a portfolio is an interactive, longitudinal process during which students are encouraged to take ownership of their learning and be proactive in planning and pursuing their educational goals while receiving guidance and feedback from a portfolio advisor.

Learning portfolios have become commonplace in both undergraduate and graduate medical education as an instrument to encourage reflection, self-assessment, and self-directed learning. Portfolios have been shown to increase students' knowledge and understanding, ability to integrate theory and practice, self-awareness and self-regulation, and ability to cope with uncertainty.

Maintaining an e-portfolio will enhance students' preparedness for their future medical training and practice during which the keeping of a portfolio and engagement in self-directed learning and reflective practice represent essential life-long learning skills for physicians.



The COP-2 E-Portfolio

1. Portfolio Purpose

The purpose of a COP-2 e-portfolio is to provide a vehicle for students to record and track their activities, achievements, and professional development longitudinally and to facilitate students' development of essential life-long learning skills for physicians.

Specifically, it:

- 1.1 Shows the student's progress through the assignments submitted, clinical experience gained, skills learned and assignments completed.
- 1.2 Allows the learner to establish and revise learning plans, time management schedules, and reflective learning.
- 1.3 Reminds the student of the learning objectives of COP-2 and the attributes of a reflective practitioner.
- 1.4 Promotes self-directed learning.
- 1.5 Chronicles evidence of the student's ability to engage in self-assessment by identifying their best work and areas for improvement through artifacts submitted and the Revised Learner's Contract (RLC).
- 1.6 Provides evidence of self-reflection: document engagement in regular self-reflection on professionalism and humanistic qualities of being a physician, such as empathy, altruism, service and caring.

2. Portfolio Objectives

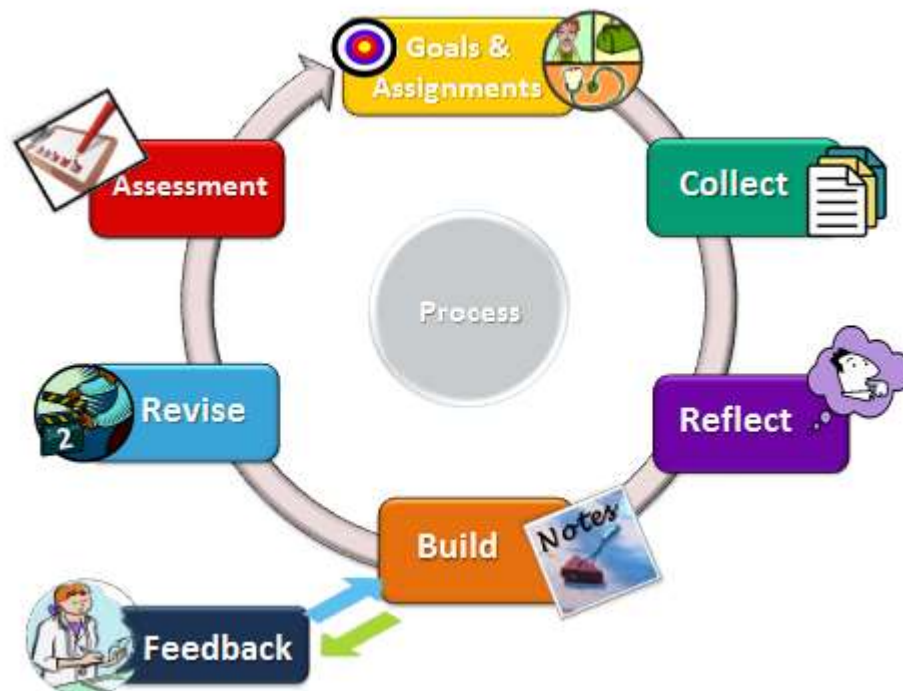
The objectives of the learning portfolio are to:

- 2.1 Document the student's progress through COP-2.
- 2.2 Clarify areas for improvement.
- 2.3 Give greater responsibility to students for their learning experience.
- 2.4 Provide an opportunity for reflective learning.
- 2.5 Provide additional information to faculty regarding students' progress and learning.
- 2.6 Facilitate communication between students and portfolio advisors.
- 2.7 Establish (and allow for revision of) learning plans and time management schedules.
- 2.8 Promote self-directed learning essential for continuing professional development and lifelong learning.

3. Portfolio Process

- 3.1 UCF College of Medicine uses LiveText® as the e-portfolio platform. LiveText® is a customizable, web-based interface that allows students to create, submit and complete assignments, and allows faculty to track and assess assignments as well as evaluate and document course objectives (www.LiveText.com).

- 3.2** Students are introduced to the e-portfolio during their first year in medical school and are instructed on how to set up a LiveText® account and personalize their profile. The e-portfolio is designed to be centered on the student who owns and fully manages its content. Thus each student is responsible for the maintenance and accuracy of their portfolio.
- 3.3** Students meet face-to-face with their assigned portfolio advisor at the beginning of the COP-2 year to review the portfolio process, exchange contact information, and agree on best communication method(s) between them. This meeting is also dedicated to discussing the H&P write-up format, content and expectations through a portfolio advisor-lead [H&P Writer's Workshop](#) (See materials at the end of this handbook, p. 67).
- 3.4** Students will collect artifacts that represent their work through COP-2, including satisfaction of all assignments and achievements on competency goals.
- 3.5** The COP-2 learning portfolio has the following components:
- 3.4.1** Assignments: These include clinical experience (clinical sessions), learning plans, self-appraisals, assessments and records of completion of each assignment.
 - 3.4.2** Records of professional development
 - 3.4.3** Reflective learning: Reflective learning uses principles similar to quality assurance employing feedback to improve learning and performance.
 - 3.4.4** Students are to constantly review the contents of their portfolios at regular intervals and review progress toward their learning plans and competency goals.



4. Portfolio Learning Plans

4.1 Students are required to develop and document a Revised Learner's Contract (RLC) at the beginning of the COP-2 academic year.

This document is to identify:

- 4.1.1** Student's personal learning needs and learning goals for COP-2.
- 4.1.2.** Learning processes: What steps or strategies students will take to achieve their goals?
- 4.1.3** How will they determine that they have achieved their goals?

5. Time Management and Communication

Time management on the student's end is an essential component of maintaining a portfolio. This includes allocating appropriate time for COP-2 learning activities, reflection, documentation and maintenance of their portfolio, as well as timely submission of assignments. Students (directly or through the COP Coordinator) are required to notify their advisor via email of assignments submitted for review, specifically after each formative H&P.

Given the lack of an instant-messaging feature within LiveText®, students and their assigned advisor will need to agree on a communication means outside of LiveText® to exchange additional comments, questions and ideas outside of their required work.

6. Portfolio Advisor Role

The e-portfolio will function as a platform for students to chronicle their learning and reflect on their progress. As such it provides an opportunity for students to develop lifelong learning skills. Crucial to this process is the **portfolio advisor**, a faculty advisor who reviews students' assignments and provides formative feedback.

Portfolio advisors' role includes:

- Meet face-to-face with assigned students at the beginning of the year to review the portfolio process, exchange contact information, and agree on best communication method(s) between them. This meeting is also dedicated to discussing the H&P write-up format, content and expectations through the [H&P Writer's Workshop](#) (details in the back of this manual, p. 67).
- Reviewing entries sent to him/her by the student.
- Provide formative feedback on written H&Ps and help students develop documentation and clinical reasoning skills
- Provide detailed constructive feedback on each H&P **within two (2) weeks** after student's submission. *(This year students' submission deadlines correspond with the last day of each calendar month; therefore, students will expect formative feedback by the 15th of the month following a formative submission.)*
- Be available to meet with students, provide support and coaching, and deal with challenging situations.

- Be a resource to students throughout the COP experience.
- Communicate to module directors any concerns regarding student entries or content not aligned with expectations or the UCF Honor Code as described in the following online document:
<http://med.ucf.edu/media/2012/08/UCF-COM-Honor-Code.pdf>

7. Formative and Summative Assessment

The electronic portfolio will be utilized as both a learning instrument to stimulate reflection, self-regulation and professional growth, as well as an instrument for assessment. The portfolio will serve as a means to assess competencies --such as self-directed learning-- as well as a vehicle for longitudinal, multi-source assessment of students' achievements. Students will be charged with completing and submitting activities and pre-defined exercises such as H&Ps, reflective exercises, clinical checklists, etc. for formative feedback. For summative assessments, students will have the opportunity to use the feedback received on formative assessments (Formative H&Ps) to complete their summative assessments (or Best Work Summative H&P) and submit this for grading (See Table below).

Each portfolio advisor is assigned a group of students and provides ongoing non-graded formative feedback to those students both individually and (if desired) in group sessions throughout the year. **Summative assessments are conducted by a dedicated UCF College of Medicine assessment team.**

7.1. COP-2 Professionalism Assessment

Students' professionalism during COP-2 is assessed by their COP preceptors at the end of the academic year. Students are expected to adhere to the UCF Honor Code and Guidelines of Professional Conduct as described in the following online document:

<http://med.ucf.edu/media/2012/08/UCF-COM-Honor-Code.pdf>

7.2. COP-2 Portfolio Entries & Assignments

Portfolio entries will be scored on timeliness, completeness, and quality based on scoring rubrics. Similarly, scoring of reflection and self-assessment assignments, including the Professional Development Plan, will be based on timely completion and submission.

Portfolio Entries & Assignments	Assessment
Revised Learner's Contract (RLC)	Summative
Written H&Ps	Video-based H&P (Formative) Formative H&P #1 Formative H&P #2 Formative H&P #3 Best Work Summative H&P
Narrative Reflection	Summative

List of all portfolio assignments and nature of assessment

8. Summative Assessment Team (SAT)

A dedicated summative assessment team composed of UCF College of Medicine core faculty (currently COP Module Directors) will provide rubric-based summative feedback on students' portfolio summative assignments. **Portfolio advisors are only expected to provide formative feedback.**

9. Module Directors

Module Directors oversee all e-portfolios and, at this time, provide summative graded feedback on students' summative assignments. Module Directors also:

- Design the portfolio program and guidelines
- Provide faculty development for portfolio advisors
- Oversee the entire e-portfolio design and coordination process
- Serve as a resource to portfolio advisors
- Constitute the SAT Team



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10. COP e-Portfolio Coordinator

The COP e-Portfolio Coordinator is the primary liaison between first and second-year students and portfolio advisors. Other relevant responsibilities of this role include:

- Assist module directors in managing all aspects of the COP-2 e-portfolio experience
- Serve as liaison between students, faculty and UCF staff, as well as between community of practice physicians and the COP program
- Recruit and coordinate orientations to community faculty directly involved with the COP and Portfolio Advisor programs
- Serve as student advisor when concerns or issues arise

Any questions or concerns regarding the COP program and e-portfolios may be forwarded to the COP e-Portfolio Coordinator directly.



Abnel Rodríguez-Castro

Community of Practice and e-Portfolio Coordinator

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11. Technical Support

For the resolution of technical issues related to the LiveText platform, please contact our COP Coordinator during regular business hours (Monday through Friday, 8:00-5:00). As an alternative, you may call 1-800-311-5656 during the hours of operation shown below, or email the LiveText support team at support@watermarkinsights.com.

LiveText Hours of Operation:

Monday to Thursday: 7:00am to 8:00pm (CT)

Friday: 7:00am to 6:00pm (CT)

Saturday: Email only

Sunday: 4:00pm to 9:00pm (CT)

12. Portfolio and COP-2 Calendar: A Year at a Glance

Weeks	Week 1-4		Week 5-8	Week 9-12	Week 13-16	Week 17-20	Week 23
COP-2 Session	Flex	Session #1	Session #2	Session #3	Session #4	Flex	Flex
WEEK / SESSION ACTIVITY	Prepare RLC Face-to-face Meeting with Portfolio Advisor	Discuss RLC with preceptor 2 patients PEL entry	 2 patients PEL entry	 2 patients PEL entry	 2 patients PEL entry	Complete any missing sessions and assignments	Work on Summative Assignments due
PORTFOLIO ACTIVITY ASSIGNMENTS DUE DATES for Students		RLC by Webcourses Video-based H&P (both due by 8/31)	Formative H&P#1 (due by students by 9/30)	Formative H&P#2 (due by students by 10/31)	Formative H&P #3 (due by students by 11/30)		Summative H&P Narrative Reflection (both due by 1/13/19)

RLC: Revised Learner's Contract (specifies student's learning needs, goals and strategies to achieve these)

H&P: History and Physical Write-up

PEL: Patient Encounter Log (submitted by students via Qualtrics®)

Session Activity: activities students complete as part of their COP-2 clinical sessions

Portfolio Activity: activity students are expected to enter in the portfolio based on session activities

Highlighted assignments are the only ones expected to be reviewed by portfolio advisors.

Portfolio Assignments

The following sections provide details on the different assignments and students' expectations of the COP-2 e-portfolio for information purposes, for the sake of portfolio advisors' understanding of student goals and program expectations, and to help facilitate a better mentoring experience. Portfolio advisors play a very important role in this educational process and are encouraged to provide spontaneous feedback on any of these e-portfolio components at any time.

Below is a list of COP-2 assignments students are expected to submit to their COP-2 e-portfolio this year. Portfolio advisors are expected to provide formative feedback on some of the assignments completed by students (**highlighted** below). However, portfolio advisors may choose to review and/or provide formative feedback on any of the assignments listed below at any time. This will help gain insight into students' learning needs, goals and progress throughout the academic year.

e-Portfolio	
Student Assignments	Due Dates for Students
Revised Learner's Contract (RLC)	8/31/2018
Video-based H&P Writer's Workshop	8/31/2018
Formative H&P #1*	9/30/2018
Formative H&P #2*	10/31/2018
Formative H&P #3*	11/30/2018
Narrative Reflection	1/13/2019
Best Work Summative H&P	1/13/2019

** Assignments reviewed by portfolio advisors*

1. Revised Learner's Contract (RLC)

An important aim of the COP-2 e-portfolio is to promote life-long learning by encouraging students to reflect on their own learning needs and to identify specific personal learning goals using a document they have already used in COP-1.

Students will revise their Learner's Contract (a.k.a. RLC) at the beginning of COP-2. In their RLC students will summarize their personal learning goals for the COP-2 experience. Students should arrive at their first COP-2 session prepared to review their RLC with their preceptor. The RLC requires that the student reflect and make explicit their learning goals for COP-2. Students should then upload their RLC onto WebCourses after discussing it with their preceptor on their first COP-2 session.

Students' steps to writing an RLC can be found in the [Appendix](#) on page 22.

Portfolio advisors may review RLCs to gain insight into students' learning needs and identified learning goals.

Although not expected, portfolio advisors may choose to provide feedback on RLCs at any time throughout the academic year.

2. History and Physical (H&P) Write-ups

A major component of the Practice of Medicine-2 Module and COP-2 e-portfolio is the development of medical documentation skills. At the beginning of their 2nd year, students have had very little practice with history and physical write-ups. Students receive didactic instruction on how to write an H&P as well as several examples of 2nd- and 3rd-year-level H&Ps as resources. However, it is the portfolio process (particularly the feedback from their portfolio advisor) the primary way students learn and practice medical documentation skills. Most importantly, these documentation skills contribute to their final module grade, **hence the importance of advisors' detailed and constructive feedback** to help students succeed at this level.

Including the video-based H&P, this year all COP-2 students are required to write five (5) complete patient write-ups and submit them to their portfolio. Portfolio advisors provide written formative feedback on 3 of these H&Ps (Formative H&Ps #1, #2 and #3) based on a pre-defined rubric (H&P Write-up Assessment Rubric, [Appendix](#), page 26).

A Best Work Summative H&P write-up is required to be submitted for summative assessment and counts towards the final COP-2 and P-2 grade.

Student H&P Assignments are as follows:

- **(1) Video-based H&P:** Prior to writing an H&P on a “real patient,” students create their first H&P write-up after watching a standardized, videotaped patient encounter. This is followed by participation in a small group [H&P Writer’s Workshop](#) with their Portfolio Advisor. In this session students and faculty use the [Guide to the Comprehensive Adult H&P Write Up](#) and the [H&P Write-Up Assessment Rubric](#) to assess and give formative feedback to each write-up, discuss the components and structure of a high-quality note as a group, and review a sample note as a reference.
- **(3) Formative H&Ps:** Documenting the full History and Physical Examination in the format of a write-up is learned through practice and feedback from portfolio advisors. **Formative H&Ps #1, #2 and #3** are reviewed by the portfolio advisor who provides formative, constructive feedback, highlighting areas to improve on future write-ups. Students should keep in mind suggestions on their formative H&Ps when they write their summative one to be graded by COP-2 Module Directors. H&P resources and grading rubric can be found in LiveText within these respective assignments.
- **(1) Best Work Summative H&P:** Students will prepare one (1) Summative H&P throughout the year to be graded by COP-2 Module Directors. This Summative H&P counts towards the P-2 final grade.

SUGGESTIONS FOR EFFECTIVE H&P FEEDBACK

- ✓ Provide **specific** feedback on each H&P (otherwise mistakes will be repeated).
- ✓ Provide feedback (+ or -) on each component of the H&P (refer to the attached rubric for module expectations).
- ✓ Encourage organization and use of conventional subheadings.
- ✓ Be specific in your comments and suggestions.
- ✓ If writing positive comments, reinforce what was done well.
- ✓ If negative comments, you may give an example of how to re-write a component of the history or physical exam.
- ✓ Consider using track changes and comments in Word; otherwise add comments to the LiveText® rubric.
- ✓ Work with students on Problem List generation and an initial assessment/plan for each problem.
- ✓ Avoid “well done” and “great job” with no additional feedback.
- ✓ Comment on and encourage correction of typos, poor grammar and misspelled words (e.g., looking up spelling of medication names).
- ✓ Encourage student to revise their H&P before submitting for a grade.
- ✓ Comment on their references and encourage use of EMB references.
- ✓ Do not be afraid to give them too many comments at once (there are only 4 H&Ps in the year, so opportunities are limited).
- ✓ Do not hesitate to make comments or suggestions --even on write-ups you believe meet expectations. You are not “marking them down”; your feedback and detailed comments will help students know what to do to get to the next level.
- ✓ It is OK to ask them to re-write the H&P if deficient in any way.
- ✓ **AVOID EXCEEDS EXPECTATIONS UNLESS TRULY OVER THE TOP****
- ✓ Remember: this is the only way they learn, by practicing!

Portfolio advisors are expected to review students' Formative H&Ps (3 per student). Students will submit these H&Ps via LiveText® as Word documents. Portfolio advisors should expect an email notification from either the student or the COP Coordinator right after an H&P has been submitted for review.

Portfolio advisors will use the attached [H&P Write-up Assessment Rubric](#) to provide formative feedback to their assigned students on LiveText® as well as feedback in the way of comments or tracked changes on the Word document students attach to LiveText®. (A LiveText® one-on-one session will be available upon request to the COP Portfolio Coordinator.).

Appendix

*The material provided in this appendix is for reference only, most of it extracted from the Student Handbook. Rubrics will be available online via [LiveText.com](https://www.livetext.com).

A. Revised Learner’s Contract (RLC) Student Instructions

An important aim of the COP-2 e-portfolio is to promote life-long learning by encouraging students to reflect on their own learning needs and to identify specific personal learning goals using a document they have already used in COP-1.

Students will revise their Learner’s Contract (a.k.a. RLC) at the beginning of COP-2. In their RLC students will summarize their personal learning goals for the COP-2 experience. Students should arrive at their first session prepared to review their RLC with their preceptor. The RLC requires that the student reflects and makes explicit their learning goals for COP-2. Students should then upload their RLC onto WebCourses after discussing it with their preceptor on their first COP-2 session.

Follow these steps to revise your learner’s contract:

Step 1: Identify learning needs

Consider if there are clinical skills or other competencies that you would like to enhance during the COP clinical experiences. Write down the areas that you would like to work on.

Step 2: Identify and document your learning goals

Select 2-3 goals that you would like to work on. You can use the “I-SMART” criteria to help you develop specific goals (see next section in Appendix).

Step 3: Determine the strategies and resources that you will employ to achieve your goals. Define your time management and deadlines.

Step 4: Share and/or discuss your learning goals and RLC with your portfolio advisor.

Step 5: Refer to your RLC throughout COP-2 to assist you in reaching your goals.

B. Writing Learning Goals: I-SMART Tool for Students

Writing an Effective Goal Statement

Tips for writing goal statements:

1. Use clear, specific language
2. Start your goal statement with TO + a VERB
3. Write your goal statement using SMART Goal Criteria
4. Avoid using negative language. Think positive!

An example of a goal statement:

*“To master performing the complete “Head-to-Toe” Physical Exam and do well on the final exam in March, I need to **perform** at least one complete PE during each of my COP sessions”.*

Note how the above example begins with the word “To”, includes the verb “perform”, and tells what (Physical Exam), why (to do well on the final exam) and when (March).

I-SMART Breakdown

I - Important: Have you identified a goal or competency that is important for you to master at this stage of your medical education? Is there an important competency that you need to master prior to progressing to the next level that you have not yet developed?

S - Specific: Be specific with your goals. Specific goals are much more likely to be achieved than non-specific goals.

- a. *What do you want to accomplish during the COP-2 clinical experience?*
- b. *Why? Specific reason, purpose, or benefits of achieving a goal.*
- c. *What steps or strategies will you take to achieve your goals? How will you determine that you have achieved your goals?*

M - Measurable: Measuring progress towards a goal helps you stay on track.

Staying on track results in a cycle that continually motivates you to put forth the effort toward reaching your goal.

- a. *How will you measure/monitor your progress?*
- b. *How will you keep yourself motivated to work towards your goal?*

A - Attainable: If a goal may seem too overwhelming to tackle, try breaking it down into steps.

- a. *Are the goals you have outlined attainable?*
- b. *Can your goals be broken down into steps that can make it more manageable and facilitate your success?*
- c. *What steps and/or strategies you will take to achieve your goals?*

R - Realistic: Personal, situational, and time factors may influence your ability to reach your goal. Consider your schedule, COP-2 dates and requirements, and other time demands and commitments when determining your goals.

- a. *What may have seemed realistic at the beginning of COP-2 may not seem so halfway through the academic year. At this point, "pause and think" and re-evaluate your learning goals and strategies and modify them as necessary.*

T - Time bound: Define start and end points to your goals and maintain a commitment to these deadlines. Goals without deadlines or schedules for completion tend to be put aside for the day-to-day crises that invariably arise in a person's life.

I-SMART Activity Worksheet for Students

Use the following I-SMART worksheet to write your learning goals and develop your RLC. Repeat this exercise as needed to write other goal statements. Once you have identified your goals, complete your RLC.

What is/are your learning goal(s)? _____

1. Is it important?

I _____

2. Is it specific?

S _____

3. Is it measurable? How will I measure or monitor progress?

M _____

4. Is it attainable? (Can this really happen? Attainable with enough effort? What steps are involved?)

A _____

5. Is it realistic? (What knowledge, skills, and resource are necessary to reach this goal?)

R _____

6. Is it time bound? (Can I set fixed deadlines? What are the deadlines?)

T _____

C. History and Physical Write-up Assessment Rubric

	Component of Write-up	Incomplete	Developing I	Developing II	Developing III	Advanced	
Subjective	Chief Complaint 0-2 points	None [0 points]		Present		Includes patient's main complaint, in patient's words, and no additional information/patient information/other non-pertinent wording [2 points]	
	Opening Sentence 0-5 points	None [0 point]		present but lacks appropriate important information, or includes information that is not important to the differential		includes appropriate history and not distractors [5 points]	
	HPI (0-10 points, 2 for each component below)						
	HPI Organization	Not organized		Partially organized		Well organized	
	HPI Thoroughness	Not thorough		Partially thorough		Very thorough	
	HPI Includes pertinent positive ROS	Does not include pertinent positive ROS		Includes some pertinent positive ROS		Includes most pertinent positive ROS	
	HPI Includes pertinent negative ROS	Does not include pertinent negative ROS		Includes some pertinent negative ROS		Includes most pertinent negative ROS	
	HPI Includes pertinent past history/ family history/social history	Does not include pertinent past history/ family history/social history		Includes some pertinent past history/ family history/social history		Includes most pertinent past history/ family history/social history	
	PMH 0-2 points	None [0 points]		Disorganized, incomplete, paragraph format		Organized, thorough, bulleted format (includes surgical history, ob/gyn history if appropriate, vaccinations & developmental history if a child) [2 points]	
	Medications 0-2 points	nothing written (if no medications, must state so) [0 point]		medications listed but uses abbreviations, trade names		Medications listed, no abbreviations, generic names, or no meds listed as "no medications" [2 points]	
	Allergies 0-2 points	Nothing listed (if no allergies, must indicate such) [0 point]		Allergies listed but not reactions		Allergies and reactions listed, or no allergies listed as "no known drug allergies" [2 points]	
	Social History 0-1 points <i>Point system does NOT reflect a lack of importance to this!!!</i>	None [0 point]		Includes some but not all of alcohol, tobacco, drug use, living situation/social support		Includes alcohol, tobacco, drug use and living situation/social support [1 points]	

	Family History 0-1 points <i>Point system does NOT reflect lack of importance</i>	None [0 point]		Includes partial family history		Includes family history [1 points]
	ROS 0- 5 points General; Skin; HEENT; Respiratory; Cardiac; GI; GU; GYN; Musculoskeletal; Vascular; Neurological; Psychiatric; Endocrine; Hematologic.	None [0 points]		Lists only a few, not organized, includes PE or other findings, repeats information already described in HPI		Thorough, excludes information written in HPI with “as in HPI” references, does not include any PE findings in ROS [5 points]
Objective	Physical Examination 0-10 points Vital Signs, General Appearance, Skin, HEENT, CV, Respiratory, GI, GU, Musculoskeletal, Neurologic, Psychiatric	None [0 points]		Incomplete, Unorganized		Includes vitals, organized in appropriate order, thorough [10 points]
Summary	Summary Statement 0-10 points	None [0 points]		Present but unorganized, does not include pertinent information or includes information that is not pertinent or incorrect		Organized, includes pertinent HPI, PE and data leading to differential diagnosis [10 points]
TOTAL FOR ABOVE: 50 POINTS						
Assessment and Plan	Problem List 0-5 points	None listed [0 points]		Present but incomplete		Organized, thorough, complete; includes chief complaint [5 points]
	Differential diagnosis 0-20 points	None [0 points]		Less than 3 items on differential		At least 3 items on the differential, includes the cc as a problem for clinical reasoning [20 points]
	Clinical Reasoning 0- 25 points	None [0 points]	Minimal reasoning, does not list most likely diagnosis or “must not miss” diagnosis	More thorough, but not organized into “differential, work up, treatment”	Thorough and organized, works through differential, describes why and why not diagnoses should be considered, includes most likely diagnosis (and describes this), includes “must not miss” diagnoses when appropriate; organized into “differential, work up, treatment plan” format	Differential and clinical reasoning “wows”; reasoning is advanced; [25 points]
TOTAL FOR ABOVE: 50 POINTS						

D. Guide to the Comprehensive Adult H&P Write-up

(Adapted from D Bynum MD, C Colford MD, D McNeely MD, University of North Carolina at Chapel Hill, North Carolina)

Chief Complaint	Include the primary symptom causing the patient to seek care. Ideally, this should be in the patient's words.
Source & Reliability	If the patient is not the source of the information state who is and if the patient is not considered reliable explain why (e.g., "somnolent" or "intoxicated")
History of Present Illness	<p>First sentence should include patient's identifying data, including age, gender, (and race if clinically relevant), and pertinent past medical history</p> <p>Describe how chief complaint developed in a chronologic and organized manner</p> <p>Address why the patient is seeking attention at this time</p> <p>Include the dimensions of the chief complaint, including location, quality or character, quantity or severity, timing (onset, duration and frequency), setting in which symptoms occur, aggravating and alleviating factors and associated symptoms</p> <p>Include the patient's thoughts and feelings about the illness</p> <p>Incorporate elements of the PMH, FH and SH relevant to the patient's story.</p> <p>Include pertinent positives and negative based on relevant portions of the ROS. If included in the HPI these elements should not be repeated in the ROS</p> <p>The HPI should present the context for the differential diagnosis in the assessment section</p>
Past Medical History	<p>Describe medical conditions with additional details such as date of onset, associated hospitalizations, complications and if relevant, treatments</p> <p>Surgical history with dates, indications and types of operations</p> <p>OB/Gyn history with obstetric history (G,P – number of pregnancies, number of live births, number of living children), menstrual history, birth control</p> <p>Psychiatric history with dates, diagnoses, hospitalizations and treatments</p> <p>Age-appropriate health maintenance (e.g., pap smears, mammograms, cholesterol testing, colon cancer) and immunizations</p> <p>Describe any significant childhood illnesses</p>
Medications	<p>For each medication include dose, route, frequency and generic name</p> <p>Include over the counter medications and supplements; include dose, route and frequency</p>

	Do not use abbreviations
Allergies	Describe the nature of the adverse reaction
Family history	<p>Comment on the health state or cause of death of parents, siblings, children</p> <p>Record the presence of diseases that run in the family (e.g., HTN, CAD, CVA, DM, cancer, alcohol addiction)</p>
Social history	<p>Include occupation, highest level of education, home situation and significant others</p> <p>Quantify any tobacco, alcohol or other drug use</p> <p>Include relevant sexual history</p> <p>Note any safety concerns by the patient (domestic violence, neglect)</p> <p>Note presence of advance directives (e.g., living will and/or health care power of attorney)</p> <p>Assess the patient’s functional status – ability to complete the activities of daily living</p> <p>Consider documentation of any important life experience such as military service, religious affiliation and spiritual beliefs</p>
Review of Systems	<p>Include patient’s Yes or No responses to all questions asked by system</p> <p>Note “Refer to HPI” if question responses are documented in the HPI</p> <p><u>Review of Systems:</u></p> <p><i>Include in a bulleted format the pertinent review of systems questions that you asked. Below is an example of thorough list. In a focused history and physical, this exhaustive list needn’t be included.</i></p> <p>skin bruising, discoloration, pruritus, birthmarks, moles, ulcers, decubiti, changes in the hair or nails, sun exposure and protection.</p> <p>hematopoietic spontaneous or excessive bleeding, fatigue, enlarged or tender lymph nodes, pallor, history of anemia.</p> <p>head and face pain, traumatic injury, ptosis.</p> <p>ears tinnitus, change in hearing, running or discharge from the ears, deafness, dizziness.</p> <p>eyes change in vision, pain, inflammation, infections, double vision, scotomata, blurring, tearing.</p> <p>mouth and throat dental problems, hoarseness, dysphagia, bleeding gums, sore throat, ulcers or sores in the mouth.</p>

	<p>nose and sinuses discharge, epistaxis, sinus pain, obstruction.</p> <p>breasts pain, change in contour or skin color, lumps, discharge from the nipple.</p> <p>respiratory tract cough, sputum, change in sputum, night sweats, nocturnal dyspnea, wheezing.</p> <p>cardiovascular system chest pain, dyspnea, palpitations, weakness, intolerance of exercise, varicosities, swelling of extremities, known murmur, hypertension, asystole.</p> <p>gastrointestinal system nausea, vomiting, diarrhea, constipation, quality of appetite, change in appetite, dysphagia, gas, heartburn, melena, change in bowel habits, use of laxatives or other drugs to alter the function of the gastrointestinal tract.</p> <p>urinary tract dysuria, change in color of urine, change in frequency of urination, pain with urgency, incontinence, edema, retention, nocturia.</p> <p>genital tract (female) menstrual history, obstetric history, contraceptive use, discharge, pain or discomfort, pruritus, history of venereal disease, sexual history.</p> <p>genital tract (male) penile discharge, pain or discomfort, pruritus, skin lesions, hematuria, history of venereal disease, sexual history.</p> <p>skeletal system heat; redness; swelling; limitation of function; deformity; crepitation: pain in a joint or an extremity, the neck, or the back, especially with movement.</p> <p>nervous system dizziness, tremor, ataxia, difficulty in speaking, change in speech, paresthesia, loss of sensation, seizures, syncope, changes in memory.</p> <p>endocrine system tremor, palpitations, intolerance of heat or cold, polyuria, polydipsia, polyphagia, diaphoresis, exophthalmos, goiter.</p> <p>psychologic status nervousness, instability, depression, phobia, sexual disturbances, criminal behavior, insomnia, night terrors, mania, memory loss, perseveration, disorientation</p>
<p>Physical examination</p>	<p><u>Describe what you see, avoid vague descriptions such as “normal”; The PE that relates to the chief complaint may need to be MORE detailed than the sample below; record any “advanced” findings/lack of findings that are pertinent (for example, presence or absence of egophany, shifting dullness, HJR)</u></p> <p>Physical Examination:</p> <p>Always begin with the vital signs. These should include;</p> <p style="padding-left: 40px;">Temperature</p> <p style="padding-left: 40px;">Pulse</p> <p style="padding-left: 40px;">Blood pressure</p>

	<p style="text-align: center;">Respiratory rate</p> <p style="text-align: center;">Pain (10 point scale rating)</p> <p>Pulse oximetry when available: include the percentage of supplemental O2. If room air, document this.</p> <p><i>EXAMPLE:</i></p> <p><i>O2 Saturation: 88% on room air, 95% on 2 liter nasal canula.</i></p> <p>General appearance: include information on the patient’s overall condition. It is appropriate to comment on level of comfort or distress, as well as general grooming and hygiene.</p> <p>Example:</p> <ul style="list-style-type: none"> • Mr. Smith is a well appearing elderly gentleman in no acute distress. • Mr. Smith is a frail appearing elderly gentleman in significant respiratory distress at the time of examination. <p>Next should follow the individual body systems in discreet subheadings.</p> <p>Traditionally, systems are listed in a top down fashion when performing a full physical examination. This may vary in subspecialty examinations such as ophthalmology or orthopedics.</p> <p>In general, the format should be as follows</p> <p>HEENT:</p> <p>Neck:</p> <p>Heart:</p> <p>Lungs:</p> <p>Abdomen:</p> <p>Exteremities:</p> <p>Neurological:</p> <p>MSK</p> <p>Vascular:</p> <p>Skin:</p> <p>Example:</p>
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	<p>HEENT:</p> <p>Head: no evidence of trauma</p> <p>Nares: normal pink mucosa, no discharge</p> <p>Eyes: no scleral icterus, normal conjunctiva</p> <p>Ears: TM's show normal light reflex, no erythema, normal landmarks</p> <p>OP: moist mucus membranes; OP with no erythema or exudate. Oral exam with no lesions.</p> <p>Neck: Supple, No thyromegaly, no lymphadenopathy, normal range of motion; JVP estimated to be 7 cm.</p> <p>Heart: PMI nondisplaced and normal size; No thrills or heaves; RRR, S1S2 with no s3 or s4, no murmurs, rubs or gallops</p> <p>Lungs: No increase work of breathing, lungs clear to auscultation, no wheezes or crackles</p> <p>Abdomen: Non distended, no scars, normoactive bowel sounds, no bruits, non-tender to palpation, no hepatosplenomegaly, no masses</p> <p>Exteremities: No clubbing, cyanosis or edema;</p> <p>Vascular: pulses are 2+ bilaterally at carotid, radial, femoral, dorsalis pedis and posterior tibial; no bruits</p> <p>Neuro: alert and oriented x 3 (person, place and time), CN II-XII intact; Motor 5/5 in all extremities. Reflexes 3+ and equal throughout. Sensory testing normal to light touch, pinprick, proprioception, and vibration. Finger-nose and Heel to shin/point to point testing normal. Rapid alternating movements normal; Gait: normal get up and go, normal heel-toe and tandem gait</p> <p>MSK: good tone throughout, no swelling/synovitis or limitation of flexion at any joint</p> <p>Skin: normal texture, normal turgor, warm, dry, no rash</p>
<p>Data collection</p>	<p>Include lab and radiological data appropriate for the HPI (include YOUR interpretation, not just copy/paste from medical record report)</p> <p>Labs:</p> <p>Chest xray or other xrays/scans</p> <p>EKG:</p>

<p>Problem List</p>	<p>List all problems, most important first; You will use this to then begin to combine/lump problems to then create your Assessment/Plan by problem list</p> <p>For example:</p> <p>Problem list:</p> <p>Chest pain</p> <p>Fever</p> <p>Shortness of breath</p> <p>Hemoptysis</p> <p>Elevated creatinine</p>
<p>Summary Statement</p>	<p>Label as summary (<i>" In summary...."</i>)</p> <p>Include 1-2 sentence impression restating basic identifying information (<i>The patient is a 45 year old male</i>),</p> <p>Most pertinent information related to the medical/family/social history (<i>with a history of tobacco use and family history of early CAD</i>),</p> <p>Expanded chief complaint and most pertinent review of systems on presentation (<i>who presents with substernal chest pressure, nausea and diaphoresis</i>)</p> <p>Most important findings on physical, labs, data (<i>and is found to have an S4, bilateral rales, and JVD on exam with evidence of pulmonary edema on CXR</i>)</p> <p>Pertinent information is that which contributes directly to building the case for your differential diagnosis....</p> <p><i><u>In summary, the patient is a 45 year old male with a history of tobacco use and family history of early CAD who presents with substernal chest pressure, nausea and diaphoresis and is found to have an S4, bilateral rales, and JVD on exam with evidence of pulmonary edema on CXR...</u></i></p> <p><i>Key phrases and structure for summary statement:</i></p> <p><i>In summary, this is a ...</i></p> <p><i>With a history of...</i></p> <p><i>Who presents with....</i></p> <p><i>And is found to have...</i></p>
<p>Assessment/Plan</p>	<p><u>Organize plan by problem: Label, Assessment/Plan by problem list</u></p>

Include at least 3 diagnoses for your differential potentially associated with the patient's chief complaint

Include the Most Likely diagnosis/diagnoses on your differential

Include the DO NOT MISS diagnoses on your differential

Order your differential to reflect most likely diagnoses or most serious diagnoses first

For each diagnosis discuss physiologic disease basis relevant to the patient and elements from the patient's history and physical that either support or refute the diagnosis. For each item on your differential, explain what makes it likely AND what makes it less likely.

It is OK to include less likely items on your differential – explain why it is important to consider but less likely the diagnosis (*PE may be considered frequently when a patient presents with shortness of breath and should be on the differential because it is a Do Not Miss diagnosis – but if the patient has a high white count, cough with sputum and infiltrate on exam, it is LESS likely*)

For each problem, discuss the diagnostic plan, treatment plan and patient education.

Outline of what this should look like...

Summary Statement...

A/P by Problem List:

- 1. Problem # 1:**
Differential Dx includes.... List at least 3 items for your differential, explain what is most likely and why, what is a must not miss, and what is less likely and why....
Diagnostic Plan will be...
Treatment plan will include...

Patient education.... Instructions to patient include...

- 2. Problem # 2:**
Differential....
Diagnostic Plan...
Treatment plan...

Patient education

- 3. Problem # 3:**
Differential...
Diagnostic plan...
Treatment plan...
Patient education...

For the main problem(s) identified in your problem list, you are expected to identify a **topic or clinical question** that would help you advance your

	<p>knowledge in that specific area to help you provide better care of patients presenting in a similar way in the future. The topic or clinical question can focus on an epidemiologic, diagnostic, therapeutic, pharmacologic, etc. aspect of patient care.</p> <p>In order to review the topic/answer your question, you should: 1) perform a literature or textbook review to answer your clinical question, 2) incorporate your findings into the assessment and plan of your write-up in the form of 1-2 paragraphs and 3) list the resources used.</p> <p>COM Library resources are strongly encouraged, for suitable resources based on topic of interest please see P2 LibGuide.</p>
Format	<p>Goal is a concise write up with your thought processes documented in logical and organized manner</p> <p>Avoid spelling or grammatical errors</p> <p>Use only commonly accepted abbreviations</p>
HIPAA	<p>Remove patient identification from write up (e.g., name, address, medical record number)</p>

E. Guide to the Comprehensive Pediatric H&P Write Up

INSTRUCTIONS FOR USE OF THE SECTION ON PEDIATRIC HISTORY AND PHYSICAL EXAM

The following outline for the Pediatric History and Physical Examination is comprehensive and detailed. In order to assimilate the information most easily, it is suggested that you read through the whole section before examining your first patient to get a general idea of the scope of the pediatric evaluation. Then, as you encounter patients with specific problems, you may return to the individual sections most pertinent to these patients to absorb the information in detail. Repeat practice with a variety of patients of different ages is crucial to the acquisition of skills in data collection. You should use every opportunity possible to evaluate patients in order to develop a sense of normal growth and development and appreciate the variations in patient encounter that is necessary to perform appropriate evaluation children of different ages.

OUTLINE FOR PEDIATRIC HISTORY

HISTORY

I. Presenting Complaint (Informant/Reliability of informant)

Patient's or parent's own brief account of the complaint and its duration. Use the words of the informant whenever possible.

II. Present Illness

Begin with statement that includes age, sex, color and duration of illness, ex.: This is the first APH admission for this 8 year old white male who has complained of headache for 12 hours PTA. When was the patient last entirely well? How and when did the disturbance start? Health immediately before the illness. Progress of disease; order and date of onset of new symptoms. Specific symptoms and physical signs that may have developed. Pertinent negative data obtained by direct questioning. Aggravating and alleviating factors. Significant medical attention and medications given and over what period.

Use day of admit (DOA) as the reference point for your timeline of present illness. Every event/symptom that occurs leading up to DOA should be listed as # day prior to admission (PTA)

In acute infections, statement of type and degree of exposure and interval since exposure.

For the well child, determine factors of significance and general condition since last visit.

III. Past Medical History

• **Birth**

A. Antenatal: Health of mother during pregnancy. Medical supervision, drugs, diet, infections such as rubella, etc., other illnesses, vomiting, toxemia, other complications; Rh typing and serology, pelvimetry, medications, x-ray procedure, maternal bleeding, mother's previous pregnancy history.

B. Natal: Duration of pregnancy, birth weight, kind and duration of labor, type of delivery, presentation, sedation and anesthesia (if known), state of infant at birth, resuscitation required, onset of respiration, first cry.

C. Neonatal: APGAR score; color, cyanosis, pallor, jaundice, cry, twitchings, excessive mucus, paralysis, convulsions, fever, hemorrhage, congenital abnormalities, birth injury. Difficulty in sucking, rashes, excessive weight loss, feeding difficulties. You might discover a problem area by asking if baby went home from hospital with his mother.

A common way to document birth history is as follows:

3445 g full term infant born to a 28 yo G2P2 O+ mother via normal spontaneous vaginal delivery after a pregnancy where mother received prenatal care in the first trimester whose prenatal labs were GBS-, HIV-, GC-, chlamydia -, RPR nonreactive. Mom reports no medications taken during pregnancy or delivery. Delivery was uncomplicated. No resuscitation was required. APGARs were 8 at 1 min and 9 at 5 min. Nursery course was uncomplicated and infant went home with mom on DOL#2.

- **Past Illnesses**

A comment should first be made relative to the child's previous general health, and then the specific areas listed below should be explored.

A. Past medical history: including all diagnoses, infections, Accidents and Injuries (include ingestions): Age, type/nature, severity, sequelae.

B. Past Hospitalizations: including operations, age. Include place of hospitalization and duration of hospitalization.

C. Past Surgeries: where and by whom for what diagnosis

D. Allergies, with specific attention to drug allergies: detail type of reaction. Results of allergy testing gif performed.

E. Medications patient is currently taking- prescribed, OTC, homeopathic. Include dose, formulation, route and frequency.

- **Immunizations and Tests**

Be familiar with Advisory Committee on Immunization Practices (ACIP) recommendations for immunizations. List date and type of immunization, facility providing immunization as well as any complications or reactions. DO NOT LIST "Up to date per parent report" If no immunization record is available, include this as a problem in the assessment and plan so it will be followed up.

- **Growth and Development**

A. Development

- Motor and Mental Development First raised head, rolled over, sat alone, pulled up, walked with help, walked alone, talked (meaningful words; sentences), formal screening when appropriate.
- Urinary continence during night; during day

- Control of feces.
- Comparison of development with that of siblings and parents.
- School grade, quality of work.
-
- Physical Growth including menarche and other pubertal developments
-
- Behavioral History
- Does child manifest any unusual behavior such as thumb sucking, excessive masturbation, severe and frequent temper tantrums, negativism, etc.?
- Sleep disturbances.
- Phobias.
- Pica (ingestions of substances other than food).
- Abnormal bowel habits, ex. - stool holding.
- Bed wetting (applicable only to child out of diapers).

- **Nutrition**

- A. Breast or Formula: Type, duration, major formula changes, time of weaning, difficulties. Be specific about how much milk or formula the baby receives. How does caretaker mix the formula?
- B. Vitamin Supplements: Type, when started, amount, duration.
- C. "Solid" Foods: When introduced, how taken, types.
- D. Appetite: Food likes and dislikes idiosyncrasies or allergies, reaction of child to eating. An idea of child's usual daily intake is important.

IV. Family History - use family tree whenever possible

- A. Age and health of family members (parents, grandparents, siblings)
- B. Stillbirths, miscarriages, abortions; age at death and cause of death of immediate members of family
- C. Known genetic diseases
- D. Diseases with a genetic contribution: allergy, blood dyscrasias, mental or nervous diseases, diabetes, cardiovascular diseases, kidney disease, rheumatic fever, neoplastic diseases, congenital abnormalities, cancer, convulsive disorders, others
- E. Health of contacts- ill exposures (tuberculosis....)

V. Social History

- A. Type of habitat. Age of habitat, number of people in home and relationship to patient
- B. Marital status of parents and involvement with child
- C. Parents employment
- D. Child care or school

VI. Environmental History

- A. Environmental tobacco smoke
- B. Water source to home
- C. Pets
- D. Smoke and CO detectors
- E. Firearms

VII. System Review

A system review will serve several purposes. It will often bring out symptoms or signs missed in collection of data about the present illness. It might direct the interviewer into questioning about other systems that have some indirect bearing on the present illness (ex. - eczema in a child with asthma). Finally, it serves as a screening device for uncovering symptoms, past or present, which were omitted in the earlier part of the interview. There is no need to repeat previously recorded information in writing a Review of Systems. Questions about health maintenance may be included here such as last dental visit, last ophthalmology visit...

A. General: Unusual weight gain or loss, fatigue, temperature sensitivity, mentality. Pattern of growth (record previous heights and weights on appropriate graphs). Time and pattern of pubescence.

B. Eyes: Have the child's eyes ever been crossed? Any foreign body or infection, glasses for any reason.

C. Ears, Nose and Throat: Frequent colds, sore throat, sneezing, stuffy nose, discharge, post-nasal drip, mouth breathing, snoring, otitis, hearing, adenitis.

D. Teeth: Age of eruption of deciduous and permanent; number at one year; comparison with siblings.

E. Cardiorespiratory: Frequency and nature of disturbances. Dyspnea, chest pain, cough, sputum, wheeze, expectoration, cyanosis, edema, syncope, tachycardia.

F. Gastrointestinal: Vomiting, diarrhea, constipation, type of stools, abdominal pain or discomfort, jaundice.

G. Genitourinary: Enuresis, dysuria, frequency, polyuria, pyuria, hematuria, character of stream, vaginal discharge, menstrual history, bladder control, abnormalities of penis or testes. Details of menarche and menstruation for adolescent females

H. Neuromuscular: Headache, nervousness, dizziness, tingling, convulsions, habit spasms, ataxia, muscle or joint pains, postural deformities, exercise tolerance, gait.

I. Endocrine: Disturbances of growth, excessive fluid intake, polyphagia, goiter, thyroid disease.

J. Hematologic: Bruise easily, difficulty stopping bleeds, lumps under arms, neck; fevers, shakes, shivers

K. Rheumatologic: Joints: pain, stiffness, swollen, variation in joint pain during day, fingers painful/ blue in cold, dry mouth, red eyes, back, neck pain

L. Skin: Ask about rashes, hives, problems with hair, skin texture or color, etc.

OUTLINE FOR PEDIATRIC PHYSICAL EXAM

PHYSICAL EXAMINATION

Every child should receive a complete systematic examination at regular intervals. One should not restrict the examination to those portions of the body considered to be involved on the basis of the presenting complaint.

Approaching the Child

Adequate time should be spent in becoming acquainted with the child and allowing him/her to become acquainted with the examiner. The child should be treated as an individual whose feelings and sensibilities are well developed, and the examiner's conduct should be appropriate to the age of the child. A friendly manner, quiet voice, and a slow and easy approach will help to facilitate the examination.

Observation of the Patient

Although the very young child may not be able to speak, one still may receive much information from him/her by being observant and receptive. The total evaluation of the child should include impressions obtained from the time the child first enters until s/he leaves; it should not be based solely on the period during which the patient is on the examining table. In general, more information is obtained by careful inspection than from any of the other methods of examination.

Sequence of Examination

Skill, tact and patience are required to gather an optimal amount of information when examining a child. There is no routine one can use and each examination should be individualized. Ham it up and regress. Get down to the child's level and try to gain his trust. The order of the exam should conform to the age and temperament of the child. For example, many infants under 6 months are easily managed on the examining table, but from 8 months to 3 years you will usually have more success substituting the mother's lap. Certain parts of the exam can sometimes be done more easily with the child in the prone position or held against the mother. After 4 years, they are often cooperative enough for you to perform the exam on the table again.

Wash your hands with warm water before the examination begins. You will impress your patient's mother and not begin with an adverse reaction to cold hands in your patients. With the younger child, get to the heart, lungs and abdomen before crying starts. Save looking at the throat and ears for last. If part of the examination is uncomfortable or painful, tell the child in a warm, honest, but determined tone that this is necessary. Looking for animals in their ears or listening to birdies in their chests is often another useful approach to the younger child.

If your bag of tricks is empty and you've become hoarse from singing and your lips can no longer bring forth a whistle, you may have to turn to muscle. Various techniques are used to restrain children and experience will be your best ally in each type of situation.

Remember that you must respect modesty in your patients, especially as they approach pubescence. Sometime during the examination, however, every part of the child must have been undressed. It usually works out best to start with those areas which would least likely make your patient anxious and interfere with his developing confidence in you.

General Physical Examination

I. Vital Signs and Measurements

Temperature, pulse rate, and respiratory rate (TPR); blood pressure (the cuff should cover 2/3 of the upper arm), weight, height, and head circumference. The weight should be recorded at each visit; the height should be determined at monthly intervals during the first year, at 3-month intervals in the second year, and twice a year thereafter. The height, weight, and head circumference of the child should be compared with standard charts and the approximate percentiles recorded. Multiple measurements at intervals are of much greater value than single ones since they give information regarding the pattern of growth that cannot be determined by single measurements.

II. General Appearance

Does the child appear well or ill? Degree of prostration; degree of cooperation; state of comfort, nutrition, and consciousness; abnormalities, gait, posture, and coordination; estimate of intelligence; reaction to parents, physician, and examination; nature of cry and degree of activity, facies and facial expression. Be as descriptive as possible in this section so that your patient "can be picked out of a crowd."

III. Skin

Color (cyanosis, jaundice, pallor, erythema), texture, eruptions, hydration, edema, hemorrhagic manifestations, scars, dilated vessels and direction of blood flow, hemangiomas, cafe-au-lait areas and nevi, Mongolian (blue-black) spots, pigmentation, turgor, elasticity, and subcutaneous nodules. Striae and wrinkling may indicate rapid weight gain or loss. Sensitivity, hair distribution and character, and desquamation. Be particularly careful in this section to describe your physical exam findings instead of just listing a diagnosis. Also pay particular attention to details that will help determine progression or resolution of lesion at subsequent visits for example, size and location...

*Practical notes:

- A. Loss of turgor, especially of the calf muscles and skin over abdomen, is evidence of dehydration.
- B. The soles and palms are often bluish and cold in early infancy; this is of no significance.
- C. The degree of anemia cannot be determined reliably by inspection, since pallor (even in the newborn) may be normal and not due to anemia.
- D. To demonstrate pitting edema in a child it may be necessary to exert prolonged pressure.
- E. A few small pigmented nevi are commonly found, particularly in older children.
- F. Spider nevi occur in about 1/6 children under 5 years of age and almost 1/2 of older children.
- G. "Mongolian spots" (large, flat black or blue-black areas) are frequently present over the lower back and buttocks; they have no pathologic significance.

H. Cyanosis will not be evident unless at least 5 gm of reduced hemoglobin are present; therefore, it develops less easily in an anemic child.

I. Carotenemic pigmentation is usually most prominent over the palms and soles and around the nose, and spares the conjunctivas.

IV. Lymph Nodes

Location, size, sensitivity, mobility, consistency. One should routinely attempt to palpate occipital, preauricular, anterior cervical, posterior cervical, sub mandibular, submental, axillary, epitrochlear, and inguinal lymph nodes.

***Practical notes:**

A. Enlargement of the lymph nodes occurs much more readily in children than in adults.

B. Small inguinal lymph nodes are palpable in almost all healthy young children. Small, mobile, non-tender shotty nodes are commonly found in residue of previous infection.

V. Head

Size, shape, circumference, asymmetry, cephalhematoma, bosses, craniotabes, control, molding, bruit, fontanel (size, tension, number, abnormally late or early closure), sutures, dilated veins, scalp, hair (texture, distribution, parasites), face, transillumination.

***Practical notes:**

A. The head is measured at its greatest circumference; this is usually at the midforehead anteriorly and around to the most prominent portion of the occiput posteriorly.

B. Fontanel tension is best determined with the quiet child in the sitting position.

C. Slight pulsations over the anterior fontanel may occur in normal infants.

D. Although bruits may be heard over the temporal areas in normal children, the possibility of an existing abnormality should not be overlooked.

E. Craniotabes may be found in the normal newborn infant (especially the premature) and for the first 2-4 months.

F. A positive Macewen's sign ("cracked pot" sound when skull is percussed with one finger) may be present normally as long as the fontanel is open.

G. Transillumination of the skull can be performed by means of a flashlight with a sponge rubber collar so that it forms a tight fit when held against the head.

VI. Face

Symmetry, paralysis, distance between nose and mouth, distance between eyes, depth of nasolabial folds, bridge of nose, distribution of hair, size of mandible, swellings, hypertelorism, Chvostek's sign, tenderness over sinuses.

VII. Eyes

Photophobia, visual acuity, muscular control, nystagmus, Mongolian slant, Brushfield spots, epicanthic folds, lacrimation, discharge, lids, exophthalmos or enophthalmos, conjunctivas; pupillary size, shape, reaction to light and accommodation; media (corneal opacities, cataracts), fundi, visual fields (in older children). At 2-4 weeks an infant will follow light. By 3-4 months, coordinated eye movements should be seen.

***Practical notes:**

- A. The newborn infant will usually open his eyes if he/she is placed in the prone position, supported with one hand on the abdomen, and lifted over the examiner's head.
- B. Not infrequently, one pupil is normally larger than the other. This sometimes occurs only in bright or in subdued light.
- C. Examination of the fundi should be part of every complete physical examination, regardless of the age of the child; dilatation of pupils may be necessary for adequate visualization.
- D. A mild degree of strabismus may be present during the first 6 months of life but should be considered abnormal after that time.
- E. To test for strabismus in the very young or uncooperative child, note where a distant source of light is reflected from the surface of the eyes; the reflection should be present on corresponding portions of the two eyes.
- F. Small areas of capillary dilatation are commonly seen on the eyelids of normal newborn infants.
- G. Most infants produce visible tears during the first few days of life but consistent tear production occurs after the first 4-6 weeks of life.

VIII. Nose

Exterior, shape, mucosa, patency, discharge, bleeding, pressure over sinuses, flaring of nostrils, septum.

At birth the maxillary antrum and anterior and posterior ethmoid cells are present. At 2-4 years pneumatization of the frontal sinus takes place but is rarely a site of infection until the 6th - 10th year. Though the sphenoid sinus is present at birth, it does not assume clinical significance until the 5th to 8th year.

IX. Mouth

Lips (thinness, down turning, fissures, color, cleft), teeth (number, position, caries, mottling, discoloration, notching, malocclusion or malalignment), mucosa (color, redness of Stensen's duct, enanthems, Bohn's nodules, Epstein's pearls), gum, palate, tongue, uvula, mouth breathing, geographic tongue (usually normal).

X. Throat

Tonsils (size, inflammation, exudate, crypts, inflammation of the anterior pillars), mucosa, hypertrophic lymphoid tissue, postnasal drip, epiglottis, voice (hoarseness, stridor, grunting, type of cry, speech). The number and condition of the teeth should be recorded. (A child should have 20 teeth by age 2½ years. When the teeth begin to erupt is quite variable but most infants have their two lower central incisors by 8-10 months.

A. Before examining a child's throat it is advisable to examine his mouth first. Permit the child to handle the tongue blade, nasal speculum and flashlight so that he/she can overcome his fear of the instruments. Then ask the child to stick out his tongue and say "Ah" louder and louder. In some cases this may allow an adequate examination. In others, if the child is cooperative enough, he/she may be asked to "pant like a puppy;" while he/she is doing this, the tongue blade is applied firmly to the rear of the tongue. Gagging need not be elicited in order to obtain a satisfactory examination. In still other cases, it may be expedient to examine one side of the tongue at a time, pushing the base of the tongue to one side and then to the other. This may be less unpleasant and is less apt to cause gagging.

B. Young children may have to be restrained to obtain an adequate examination of the throat. Eliciting a gag reflex may be necessary if the oral pharynx is to be adequately seen.

C. The small child's head may be restrained satisfactorily by having the mother place her hands at the level of the child's elbows while the arms are held firmly against the sides of his head.

D. If the child can sit up, the mother is asked to hold him erect in her lap with his back against her chest. She then holds his left hand in her left hand and his right hand in her right hand, and places them against the child's groin or lower thighs to prevent him from slipping down from her lap. If the throat is to be examined in natural light, the mother faces the light. If artificial light and a head mirror are used, the mother sits with her back to the light. In either case, the physician uses one hand to hold the head in position and the other to manipulate the tongue blade.

E. Young children seldom complain of sore throat even in the presence of significant infection of the pharynx and tonsils.

XI. Ears

Pinnas (position, size), canals, tympanic membranes (landmarks, mobility, perforation, inflammation, discharge), mastoid tenderness and swelling, hearing (including hearing screen).

***Practical notes:**

A. A test for hearing is an important part of the physical examination of every infant.

B. The ears of all sick children should be examined.

C. Before actually examining the ears, it is often helpful to place the speculum just within the canal, remove it and place it lightly in the other ear, remove it again, and proceed in this way from one ear to the other, gradually going farther and farther, until satisfactory examination is completed.

D. In examining the ear, as large a speculum as possible should be used and should be inserted no farther than necessary, both to avoid discomfort and to avoid pushing wax in front of the speculum so that it obscures the field. The otoscope should be held balanced in the hand by holding the handle at the end nearest the speculum. One finger should rest against the head to prevent injury resulting from sudden movement by the child.

E. The child may be restrained most easily if he/she is lying on his abdomen.

F. Low-set ears are present in a number of congenital syndromes, including several that are associated with mental retardation. The ears may be considered low-set if they are below a line drawn from the lateral angle of the eye and the external occipital protuberance.

G. Congenital anomalies of the urinary tract are frequently associated with abnormalities of the pinnae.

H. To examine the ears of an infant it is usually necessary to pull the auricle backward and downward; in the older child the external ear is pulled backward and upward.

XII. Neck

Position (torticollis, opisthotonos, inability to support head, mobility), swelling, thyroid (size, contour, bruit, isthmus, nodules, tenderness), lymph nodes, veins, position of trachea, sternocleidomastoid (swelling, shortening), webbing, edema, auscultation, movement, tonic neck reflex.

***Practical notes:**

In the older child, the size and shape of the thyroid gland may be more clearly defined if the gland is palpated from behind.

XIII. Thorax

Shape and symmetry, veins, retractions and pulsations, beading, Harrison's groove, flaring of ribs, pigeon breast, funnel shape, size and position of nipples, breasts, length of sternum, intercostal and substernal retraction, asymmetry, scapulas, clavicles.

***Practical notes:**

At puberty, in normal children, one breast usually begins to develop before the other. In both sexes tenderness of the breasts is relatively common. Gynecomastia is not uncommon in the male.

XIV. Lungs

Type of breathing, dyspnea, prolongation of expiration, cough, expansion, fremitus, flatness or dullness to percussion, resonance, breath and voice sounds, rales, wheezing.

***Practical notes:**

A. Breath sounds in infants and children normally are more intense and more bronchial, and expiration is more prolonged, than in adults.

B. Most of the young child's respiratory movement is produced by abdominal movement; there is very little intercostal motion.

C. If one places the stethoscope over the mouth and subtracts the sounds heard by this route from the sounds heard through the chest wall, the difference usually represents the amount produced intrathoracically.

XV. Heart

Location and intensity of apex beat, precordial bulging, pulsation of vessels, thrills, size, shape, auscultation (rate, rhythm, force, quality of sounds - compare with pulse as to rate and rhythm; friction rub-variation with pressure), murmurs (location, position in cycle, intensity, pitch, effect of change of position, transmission, effect of exercise).

***Practical notes:**

A. Many children normally have sinus arrhythmia. The child should be asked to take a deep breath to determine its effect on the rhythm.

B. Extra systoles are not uncommon in childhood.

C. The heart should be examined with the child recumbent.

XVI. Abdomen

Size and contour, visible peristalsis, respiratory movements, veins (distension, direction of flow), umbilicus, hernia, musculature, tenderness and rigidity, tympany, shifting dullness, tenderness, rebound tenderness, pulsation, palpable organs or masses (size, shape, position, mobility), fluid wave, reflexes, femoral pulsations, bowel sounds. If the liver is palpable below the right costal margin, its total span must be recorded. A deep abdomen palpation must be done on every child.

***Practical notes:**

A. The abdomen may be examined while the child is lying prone in the mother's lap or held over her shoulder, or seated on the examining table with his back to the doctor. These positions may be particularly helpful where tenderness, rigidity, or a mass must be palpated. In the infant the examination may be aided by having the child suck at a "sugar tip" or nurse at a bottle.

B. Light palpation, especially for the spleen, often will give more information than deep.

C. Umbilical hernias are common during the first 2 years of life. They usually disappear spontaneously.

XVII. Male Genitalia

Circumcision, meatal opening, hypospadias, phimosis, adherent foreskin, size of testes, cryptorchidism, scrotum, hydrocele, hernia, pubertal changes.

***Practical notes:**

A. In examining a suspected case of cryptorchidism, palpation for the testicles should be done before the child has fully undressed or become chilled or had the cremasteric reflex stimulated. In some cases, examination while the child is in a hot bath may be helpful. The boy should also be examined while sitting in a chair holding his knees with his heels on the seat; the increased intra-abdominal pressure may push the testes into the scrotum.

B. To examine for cryptorchidism, one should start above the inguinal canal and work downward to prevent pushing the testes up into the canal or abdomen.

C. In the obese body, the penis may be so obscured by as to appear abnormally small. If this fat is pushed back, a penis of normal size is usually found.

XVIII. Female Genitalia

Vagina (imperforate, discharge, adhesions), hypertrophy of clitoris, pubertal changes.

***Practical note:**

Digital or speculum examination is rarely done until after puberty.

XIX. Rectum and Anus

Irritation, fissures, prolapse, imperforate anus. The rectal examination should be performed with the little finger (inserted slowly). Note muscle tone, character of stool, masses, tenderness, sensation. Examine stool on glove finger (gross, microscopic, culture, guaiac), as indicated.

XX. Extremities

A. General: Deformity, hemiatrophy, hemihypertrophy, bowlegs (common in infancy), knock-knees (common after age 2), paralysis, edema, coldness, posture, gait, stance, asymmetry.

B. Joints: Swelling, redness, pain, limitation, tenderness, motion, rheumatic nodules, carrying angle of elbows, tibial torsion.

C. Hands and feet: Extra digits, clubbing, simian lines, curvature of little finger, deformity of nails, splinter hemorrhages, flat feet (feet commonly appear flat during first 2 years), abnormalities of feet, dermatoglyphics, width of thumbs and big toes, syndactyly, length of various segments, dimpling of dorsa, temperature.

D. Peripheral Vessels: Presence, absence or diminution of arterial pulses.

XXI. Spine and Back

Posture, curvatures, rigidity, webbed neck, spina bifida, pilonidal dimple or cyst, tufts of hair, mobility, Mongolian spots, tenderness over spine, pelvis or kidneys.

XXII. Neurologic Examination

A. Cerebral Function: General behavior, level of consciousness, intelligence, emotional status, memory, orientation, illusions, hallucinations, cortical sensory interpretation, cortical motor integration, ability to understand and communicate, auditory-verbal and visual-verbal comprehension, recognition of visual object, speech, ability to write, performance of skilled motor acts.

B. Cranial Nerves:

1. I (olfactory) - Identify odors; disorders of smell

2. II (optic) - Visual acuity, visual fields, ophthalmoscopic examination, retina.

3. III (oculomotor), IV (trochlear), and VI (abducens) - Ocular movements, ptosis, dilatation of pupil, nystagmus, pupillary accommodation, and pupillary light reflexes.

4. V (trigeminal) - Sensation of face, corneal reflex, masseter and temporal muscles, maxillary reflex (jaw jerk).

5. VII (facial) - Wrinkle forehead, frown, smile, raise eyebrows, asymmetry of face, strength of eyelid muscles, taste on anterior portion of tongue.

6. VIII (acoustic) -

- a. Cochlear portion - Hearing, lateralization, air and bone conduction, tinnitus.
- b. Vestibular - Caloric tests.

7. IX (glossopharyngeal), X (vagus) - Pharyngeal gag reflex, ability to swallow and speak clearly; sensation of mucosa of pharynx, soft palate, and tonsils; movement of pharynx, larynx, and soft palate; autonomic functions.

8. XI (accessory) - Strength of trapezius and sternocleidomastoid muscles.

9. XII (hypoglossal) - Protrusion of tongue, tremor, strength of tongue.

C. Cerebellar Function: Finger to nose, finger to examiner's finger, rapidly alternating pronation and supination of hands; ability to run heel down other shin and to make a requested motion with foot; ability to stand with eyes closed; walk; heel to toe walk; tremor; ataxia; posture; arm swing when walking; nystagmus; abnormalities of muscle tone or speech.

D. Motor System: Muscle size, consistency, and tone; muscle contours and outlines; muscle strength; myotonic contraction; slow relaxation; symmetry or posture; fasciculations; tremor; resistance to passive movement; involuntary movement.

E. Sensory System: Hearing, vision, light touch, pain, position, vibration.

F. Reflexes:

1. Deep reflexes - Biceps, brachioradialis, triceps, patellar, Achilles; rapidity and strength of contraction and relaxation.
2. Superficial reflexes - Abdominals, cremasteric, plantar, gluteal.
3. Pathologic reflexes - Babinski, Chaddock, Oppenheim, Gordon.

G. Newborn Neurological Examination

***Practical Points:**

Observe the normal flexion of the term infant in contrast to the non-flexed, even flaccid appearance of the normal resting premature. The shape of the premature skull is usually

dolichocephalic (long and narrow). Elicit the normal reflexes of grasping (hand and foot), sucking, rooting, Moro and automatic walking. Palpate the head to identify the anterior and posterior fontanelles as well as the sagittal, coronal, metopic and lambdoid sutures.

Impression and Plan

I. Problem List

The problems can be definite diagnoses, symptoms, abnormal findings, or other concerns. Probable or possible diagnosis ("rule out") should not be listed as problems. If your problem list contains a number of symptoms or signs that initially do not fit together each should be listed separately. They may on subsequent days be seen as manifestations of the specific disease. They may then be combined into one problem.

Health Maintenance should be included on the problem list for all children. We list it as a problem to remind us that our major goal is to not let the immediate disease obscure our view of the whole patient. Include here the follow up plan, even from the start. That will help remind the inpatient care team to communicate with the primary care provider.

An example of a problem list follows for a child who is hospitalized with fever, vomiting and pyuria. You find in the past history that he had an allergic reaction to penicillin 6 months ago. In this case the problem list might be put in the chart as:

Fever

Vomiting

History of penicillin allergy

Health Maintenance

Any new problems can be added as the database expands.

II. Impression

A diagnostic impression should be developed. A problem list can be useful for beginners to try to synthesize a patient's findings into a coherent diagnosis and is highly encouraged in your formal write ups. One useful way to synthesize this information is to first describe the anatomy of each abnormality, then to describe the pathologic process (e.g., neoplastic, inflammatory, infectious), finally arriving at a coherent diagnosis. The cycle of data collection, hypothesis setting, hypothesis testing, and action is put into place. The selection of a diagnostic pivot, or unique finding, may assist in narrowing down the differential diagnosis. The rules of parsimony, chronology, and plausibility should be remembered. Common diagnostic errors, such as premature closure (i.e., reaching a conclusion before there is enough data to support it) should be avoided. Common and catastrophic diagnoses are the most important ones to address.

III. Plan

A diagnostic and therapeutic plan should address each diagnostic impression. Tests should be ordered only if the result will alter the plan. Pediatricians tend to be fairly conservative in prescribing medication, especially for self-limited diseases, such as the common cold. One useful way to delineate a plan is by systems (e.g., cardiovascular, pulmonary, hematologic, infectious, fluid/electrolytes/nutrition, etc.).

IV. Discussion

A concise discussion of one or more aspects of our patient's medical problem should follow. The topic should be pertinent to your patient. The goal is not to exhaust the medical literature on a given topic, but to stimulate patient-oriented reading and to encourage you to synthesize your thoughts.

For example, on a patient admitted with sickle cell disease and fever, you might choose to discuss the immune problems of children with sickle cell and their clinical importance. You would not be expected to discuss the molecular biology of sickling and all the various problems this creates.

After you have demonstrated outside reading on a topic, the most important step in the discussion is to apply that reading to the care of your patient. Write at least a concluding paragraph in your discussion that directly relates what you have read to the care of your patient. For example, when writing about immune problems in sickle cell disease, you might conclude with a paragraph of your patient's probable immune problems given his sickle cell disease. This will show interpretation of your reading and application to your patient's care based on his age, past medical history, and current presenting symptoms.

If you are unsure about a topic, or need help with sources, discuss this with your attending.

Include a list of references used at the end of your discussion. At least one basic text and in addition one recent article from the peer reviewed literature should be included as references.

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F. Sample of a Comprehensive Adult History and Physical by a Student

This sample summative H&P was written by a second-year medical student from UCF COM Class of 2020 at the end of COP-2. While not perfect, it best exemplifies the documentation skills students are expected and able to acquire by the end of P-2: organization, thoroughness, relevance, chronology, integrated topic review, documentation of references, etc.

Chief Complaint: “I got lightheadedness and felt too weak to walk”

Source and Setting: Patient reported in an in-patient setting on Day 2 of his hospitalization.

History of Present Illness: Patient is a 48 year-old well-nourished Hispanic male with a 2-month history of Rheumatoid Arthritis and strong family history of autoimmune diseases presenting after an episode of lightheadedness and muscle weakness.

Patient began experiencing symptoms 4 months ago (November 2017). At that time he experienced fatigue and joint pain in the knees and hands. He was diagnosed with Rheumatoid Arthritis. He was given a short course of corticosteroids at that time that alleviated his symptoms. He was also started on methotrexate at that time. However, he felt that the medication was ineffective and stopped after 2 weeks.

For the past two months, the patient has been experiencing worsening symptoms. He has been experiencing progressively worsening headaches accompanied with lightheadedness, light and sound sensitivity, nausea, and vomiting. He reports no loss of consciousness associated with the headaches. No convulsion, change of vision, or loss of continence. When the headaches began 2 months ago, they would last about half of a day and occur approximately once per week. They increased in frequency and duration and over the last month have been almost daily and lasted most of the day. He is unable to eat during headaches. Concurrently, the patient is experiencing worsening joint pain in the knees and hands. The pain is constant, accompanied by swollen and hot joints, and not alleviated by NSAIDS. Also in the last two months, he has experienced a dry mouth that makes swallowing food difficult and a burning sensation in his eyes.

In the last month, the patient has been experiencing night sweats, chills, and subjective fevers almost every night. This has impacted his sleep significantly, and he has not been able to sleep more than 4 consecutive hours in over one month. Three days ago, the patient was at work when a headache came on, he felt particularly light headed and weak. His left work early on that day. In the last three days the patient has had a constant headache and

lightheadedness, and felt unable to eat. When he has tried to eat, he has vomited immediately after eating. He has had no changes to his bowel movements. No blood in the stool or urine. The joint pain has returned to a 10/10 in severity in the past 3 days. The patient has felt too weak to walk or leave the bedroom. He was brought to the hospital by his sister, a nurse, after two days being unable to leave bed. At this time, his sister noticed a facial rash in the pre-auricular area that extended over the eyelids and bridge of the nose as well as cervical lymphadenopathy. The patient was unaware of these findings and did not know how long the rash or lymphadenopathy had been present for. At the time of the physical exam, the rash was limited to the pre-auricular area.

During the course of the past four months the patient reports a 36 pound unintentional weight loss and significant decrease to his muscle mass. He has been experiencing early satiety and nausea when he does eat. He reports no loss of sensation, pain, temperature, vibration. He does report clumsiness, especially of the hands. He also reports a depressed mood and frustration with being unable to work during his illness.

Past Medical History:

- Rheumatoid Arthritis, diagnosed January 2018. Patient was diagnosed when he presented to the emergency room with joint pain in the hands and knees. He was treated with corticosteroids and methotrexate. The patient reported that the corticosteroids helped his symptoms significantly. He only continued on the methotrexate for 2 weeks, as he did not feel it helped with his symptoms.
- Up to date with vaccinations, including yearly influenza vaccine

Surgical History:

- Nasal artery cauterization and clip placement - 2011

Medications:

- Ibuprofen PRN for headaches and joint pain.

Allergies: No known drug allergies. No known environmental, food, or seasonal allergies.

Family History:

- Father – Living aged 74- HTN
- Mother- living aged 72 - Hypothyroidism
- Brother – living aged 44 – Vitiligo
- Sister – living aged 40 – No known chronic health issues
- 2 sons - living, aged 27 and 24 – No known chronic health issues

Social History:

Patient is a high school graduate, working as an electrician, living with his wife of 25 years and 2 dogs. Patient feels safe and well-cared for in his home. He works as an electrician, a job with daily physical exertion that requires climbing ladders and the lifting of heavy

objects. These aspects of his job have been impacted with his lightheadedness and muscle pain and weakness. Patient is concerned about having to miss additional work due to his illness. Patient denies any history of smoking. Patient reports previously drinking alcohol socially -1-2 beers, 1-2 times per month - however has ceased alcohol intake since the onset of symptoms 4 months ago. Patient denies any recreational drug use. Patient denies any exercise, though he feels that physically exerted every day at his job. Patient reports a well-rounded non-vegetarian diet of mostly home cooked meals of meat and vegetables. Patient is sexually active with his wife and reports a happy and monogamous relationship.

Review of Systems:

- Skin: Positive for facial in the pre-auricular area, see HPI. Negative for photosensitivity, easy bruising, skin discoloration, new or changing moles, ulcers, hair loss, or dry or brittle nails, or dry skin.
- Hematopoietic: Positive for fatigue, lightheadedness, headaches, enlarged non-tender lymph nodes. Negative for tinnitus, fainting.
- Head and Face: No pain, traumatic injury, ptosis, loss of sensation.
- Ears: No changes to hearing, discharge from ears.
- Eyes: Positive for burning sensation, See HPI. No changes to vision, inflammation, infections, double vision, tearing.
- Mouth and Throat: See HPI, positive for dry mouth and dysphagia. No dental problems, hoarseness, or bleeding gums.
- Nose and Sinus: No discharge, epistaxis, sinus pain, obstruction.
- Respiratory: No cough, sputum, dyspnea, wheezing.
- Cardiovascular: No chest pain, dyspnea, swelling of extremities, hypertension, exercise intolerance, or palpitations.
- Gastrointestinal: Positive for anorexia, decreased appetite, nausea, vomiting. No PICA, heartburn, change in bowel habits or bowel texture. No blood in the stool.
- Genital Tract: No discharge, pain, pruritus, history of sexually transmitted infections.
- MSK: Positive for painful, hot, and tender joints with subjective swelling. See HPI
- Nervous System: See HPI regarding recent lightheadedness. No tremor, ataxia, difficulty speaking, loss of sensation, seizures, changes in memory.
- Endocrine: See HPI regarding fatigue. No tremor, heat or cold intolerance, polyuria, polydipsia, goiter.
- Psychological: Positive for depressed mood. No nervousness, phobia, insomnia, memory loss, disorientation.

Physical Exam:

Vitals: T 98.5, HR 68, BP 126/85, RR 16.

General Appearance: Patient is a ill-appearing, well-nourished man in no acute distress.

Skin: Macular rash in the pre-auricular area. No pallor. Normal texture, normal turgor, warm, dry.

Eyes: Normal pink mucosa with no signs of pallor, no scleral icterus.

Neck: Lymphadenopathy in the anterior cervical chain and supraclavicular chain. Lymph nodes were 4-5 mm and not fixed. No Lymphadenopathy in posterior cervical chain. No thyromegaly.

Heart: PMI non-displaced and heart of normal size; no thrill or heaves, RRR, S1S2 with no S3 or S4. No murmurs, rubs, or gallops.

Lungs: No increased work of breathing, lungs clear to auscultation bilaterally, no wheezes or crackles.

Extremities: Normal capillary refill, no edema, clubbing, cyanosis

Abdomen: Non-distended, no scars, normoactive bowel sounds, no bruits, non-tender to palpation, no hepatosplenomegaly, no masses

Neuro: Alert and oriented X 3. Strength of biceps, triceps, hand grip, finger spread, hip flexion, knee flexion, and knee extension 4/5 bilaterally. Cranial Nerves II-XII were grossly intact. Tandem gait was normal symmetric. Sensation intact to light touch and sharp vs dull on distal arms and legs. Proprioception intact.

Pertinent Diagnostic Tests:

January 8 2018:

- Autoimmune:

- Positive ANA (>1:640)
- Positive Rheumatoid Factor (70, Normal <20)
- Elevated CCP
- Positive SS-A
- Positive for HLA Cass 1
- Elevated Sedimentation Rate (46, Normal 0-15mm/hr)
- Positive Double Stranded DNA Antibody (>300, Normal <10)
- Negative Smith Antibody, Negative Jo-1, Negative Scl-70

- Hematologic:

- Decreased CD4 (147 cells/uL, Normal: 492-1656 cells/uL)
- Decreased WBC (4.0, Normal: 4.1-10.4 x 10⁽³⁾/uL)
- Decreased RBC (4.32, Normal: 4.4-5.6 x 10⁽⁶⁾/uL)
- Normal Hemoglobin (13.9, Normal 13.7-16.7 g/dL)
- Normal Hematocrit (41.3%, Normal 40.0-48.0%)

- Infectious (All Negative): Negative Hepatitis Panel (B surface antigen, B core IgM, Hepatitis C), Negative STI Panel (N Gonorrhoeae DNA, trachomatis DNA), Negative Parvovirus B19 IgG/IgM, Negative Cytomegalovirus

February 27 2018:

- Hematologic:

- Elevated Lactate Dehydrogenase (333, Normal 140-271)
- Elevated Creatinine Kinase (229, Normal: 30-223)

- Decreased RBC (3.72x 10⁶, Normal: 4.4-5.6 x 10⁶)/uL)
- Decreased Hemoglobin (11.7, Normal 13.7-16.7 g/dL)
- Decreased Hematocrit (35.1%, Normal 40.0-48.0%)
- Decreased WBC (3.7, Normal: 4.1-10.4 x 10³)/uL)
- Decreased Platelets (112, Normal: 145-355 x 10³)/uL)
- **Imaging:**
 - CT showed chronic enlargement of the Parotid Gland
 - Head CT came back with no abnormalities
 - US showed bilateral neck, axilla, and groin lymphadenopathy. However, nodes show normal morphology and normal fatty hila

Problem List:

Joint Pain
 Unintentional Weight Loss, Fever, Night Sweats
 Early Satiety
 Dry eye and Mouth
 Headaches with lightheadedness, nausea
 Lymphadenopathy
 Facial Rash

Summary Statement:

In summary patient is a 48 year old Hispanic male with a 2 month history of Rheumatoid Arthritis and a strong family history of autoimmune disease, who presents with a four month history of joint pain and weakness, a 2 month history of headaches with lightheadedness and nausea, and a one month history of subjective fever, and night sweats alongside symptoms of burning eyes and dry mouth, decreased RBC and Hemoglobin, and a CT with an enlarged parotid gland.

Assessment and Plan:

Differential diagnosis includes:

- Most Likely: Sjögrens Syndrome

Assessment: The patient has a personal history of autoimmune disease and a positive HLA genotype. He was diagnosed with Rheumatoid arthritis 2 months ago. His presenting symptom of bilateral joint pain in the knees and fingers paired with a positive RF, CCP, and decreased CD4 count made this diagnosis very likely. Sjögrens Syndrome is very heavily associated with Rheumatoid Arthritis, estimated prevalence between 17-30%⁸ in those with previously diagnosed Rheumatoid Arthritis. The patient’s laboratory and imaging studies, including a positive SS-A, neck CT showing chronic enlargement of the Parotid Gland, paired with the symptom of dry mouth and a burning sensation of the eye, a possible manifestation of dry eyes, are suggestive of Sjögrens Syndrome. Another possible cause of the burning sensation is trigeminal neuralgia, a neurological manifestation of Sjogren’s

syndrome. However, this patient also presents with some of rarer manifestations of Sjögrens Syndrome. According to *UpToDate: Clinical manifestations of Sjögren's syndrome: Extraglandular disease*, normochromic normocytic anemia can be seen in up to 20% of sjogrens patients. Further, "Patients with SS may exhibit abnormal counts in any cell line, and patients with cytopenia often have involvement of more than one cell line"³. This hematologic manifestation of disease accounts for many of the abnormal blood tests including the anemia and leukopenia. This anemia could be the underlying cause of the lightheadedness and muscle weakness. Further, a more rare manifestation of Sjögrens Syndrome, is autonomic neuropathy³. Autonomic neuropathy manifests as headache, lightheadedness, early satiety, vomiting, weight loss, and sweating abnormalities. The patient's headaches with lightheadedness, as well as his GI symptoms and night sweats can be explained by the neurological manifestations of Sjögren's syndrome. Finally, autoimmune diseases are often associated with cutaneous manifestations. Some of these, such as the malar rash of lupus are well defined, while others are ill defined. The pre-auricular rash can be seen as an atypical cutaneous presentation of Sjogren's syndrome.

Plan: A Schirmer test would help differentiate if the burning sensation in the eyes is due to dry eyes or another cause, possibly trigeminal neuralgia. Acutely, the patient should be started on corticosteroids to treat the acute symptoms of Sjögrens syndrome. Long term, hydrochloroquine or an immunosuppressant may want to be considered. This should help with the joint pain and constitutional symptoms. Monitoring of RBC and WBC should be continued to make sure they return to normal ranges after this acute event.

- Alternative: Systemic Lupus Erythematosus (SLE)

Assessment: SLE is another very possible diagnosis. The history of autoimmune diseases, paired with the SS-A and dsDNA can point us towards a diagnosis of Lupus. The anemia and leukopenia can also be accounted for by SLE. However, SLE would not explain the dry mouth and burning eyes, nor would it explain the parotid gland involvement. However, the macular rash in the pre-auricular area, which the sister described as extending over the eyelids and bridge of the nose, does sound suspicious of the malar rash. However, at the time of physical exam, the rash was only seen in the pre-auricular area. The patient denies any photosensitivity. While SLE cannot be ruled out at this time, Sjogren's Syndrome accounts for a more global diagnosis of the patient's symptoms.

Plan: Continue to monitor kidney function, as SS-a in Lupus increases the risk of Lupus Nephritis. Treatment for acute exacerbation is still corticosteroids.

- Do Not Miss: B-Cell Lymphoma

Assessment: Patients with both Rheumatoid Arthritis and Sjögrens syndrome have an increased risk of B-Cell lymphoma. This patient is experiencing night sweats, unintentional weight loss, subjective fever, and lymphadenopathy. He also has enlargement of the

Parotid gland. The severity of this diagnosis makes it a do not miss in the differential. However, the small size of the lymph nodes, 4-5 mm, and the nature, not-fixed, makes this diagnosis less likely. Further, while the patient is experiencing Leukopenia, it is not extreme. We would expect a much lower WBC if this were a lymphoma.

Plan: Biopsy of the parotid gland and/or cervical lymph nodes to rule out lymphoma.

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G. Sample of a Pediatric History and Physical

July 8th 2012

Initials: WL 54-day-old Hispanic male

History taken from mother- reliable

CC: "WL has been having worsening vomiting after feeds for 2 weeks"

HPI:

WL is 54-day-old Hispanic male born at term without complications via SVD who for the past 2 weeks has had worsening non-bloody, non-bilious, non-projectile vomiting that happens right after feeds and with every feed. Mom describes it as "milky with acidic smell". She also reports that WL is constantly hungry, has become more fussy and has been crying more often. Despite his vomiting, mom thinks that he is still gaining weight. She denies any family history of similar symptoms. WL's PCP diagnosed him with reflux 10 days PTA but did not prescribe any medication.

Mom switched WL from Gerber Good Start to Gerber Soy formula hoping that this would relieve his symptoms. He takes 3 ounces every 3 hours and drinks very quickly. The vomiting continued and mom went with WL to Heart of Florida ED 7 days PTA, where he was diagnosed with colic and sent home without any medications. As the symptoms were getting worse and mom was concerned about dehydration, the next day mom went to APH ED but was discharged once again. His weight at this time was 6 kg.

Convinced that something was seriously wrong with her son, mom brought WL to the FH ED today where he was found to have 100.5 fever and a slight pink tinge to milky emesis. Mom also noted decreased urine output (1 wet diaper in last 12 hours) and no stools for 2 days. She denies pain but feels patient is very hungry and cannot sleep.

As there was concern for sepsis, his blood, CSF, nasal swab and urine were collected for culture. After culture collection, he was given Rocephin (unknown does). As there was concern with pyloric stenosis, abdominal ultrasound was ordered, surgery consulted and NG tube placed (to release intragastric pressure).

PMH:

BIRTH

Antenatal: Mom is 28 yo G1P0 and had no complications during pregnancy. She received prenatal care in the first trimester. She tested positive for GBS at 35 wk of pregnancy for which she was given ampicillin (unknown dose) 4h before delivery. According to mom, she was immune to rubella and tested negative for chlamydia, gonorrhea, HBsAG, HIV, and VDRL/RPR.

Natal: 38 wk, spontaneous vaginal delivery, SROM, no resuscitation was required, no meconium was present. Wt: 3680 grams at birth (50th percentile), head circumference and height unknown, APGAR unknown. Went home on DOL 2. State newborn screen was negative.

PAST ILLNESSES: no illnesses, no hospitalizations, no surgeries

Meds: no prescribed medicine taken at home, Rocephin started in ED (dose unknown yet).
No vitamin supplements

Allergies: NKDA

Immunization: Hep B vaccine given at birth at hospital. Due for 2 months immunization (2nd dose Hep B, rotavirus, DTaP, Hib, PCV, IPV)- had appointment with PCP for tomorrow but had to cancel

Nutrition: breastfeeding for first 3 days of life. Mom stopped because of “breast infection” and discomfort. WL has been hungrier since vomiting started. He’s been fed with Gerber Soothe formula 3-3.5 oz every 2-4h until admission but overall intake has been decreased because of vomiting.

Growth and development:

WL is 158% of his birth weight, current weight 5.85kg (75-90 percentile), on average about 40g weight gain per day

Hearing test passed after birth

No abnormalities in development: Lifts head and chest when lying on stomach, follows objects, coos, has social smile

FAMILY HISTORY:

- Mother 28 and father 30 don’t have any medical conditions. No siblings.
- Maternal grandmother- HTN. Paternal grandmother- HTN, DM 2 .
- No family history of GI disorders, pyloric stenosis, milk intolerance, food allergies, mental retardation, Down syndrome, genetic diseases or cancer. No history of anemia, liver disease, gall bladder or other chronic diseases.
- No exposure to TB. No sick contacts.

SOCIAL HISTORY:

Patient lives with mom and dad. Both parents work at Disney but mom took some time off to

take care of WL. She plans to return to work the second week of August. He does not attend daycare. There are no siblings. They have a cat for pet at home. Nobody in family smokes. They did not travel anywhere outside the country recently. They did not have any visitors from outside USA. Their home is supplied with city water which mom uses to mix WL's formula.

ROS:

General: decreased oral intake because of vomiting, no stools for 2 days, decreased voiding, fussy, fever today
Eyes: no discharge
Skin: no rashes, no hives, no itching, no jaundice, no lesions
Ears, Nose and Throat: no rhinorrhea, no ear tugging
Cardiorespiratory: no difficulty breathing, no cough, no sputum, no wheeze, no expectoration, no cyanosis, no edema, no syncope
Gastrointestinal: non-projectile non-bilious non-bloody vomiting after every feed, no diarrhea, no stool in 2 days, no reported abdominal pain Usually 3 stools/day (green color) but no stool for 2 days. Diaper wetting usually 6-8x a day but decreased to 4x a day.

Genitourinary: no frequency, no polyuria, no hematuria, decreased urine output for 2 d ays

Neuromuscular: no reported muscle pain, no lethargy, no jitteriness

Immunologic: no history of recurrent infections

PE:

Wt: 5.85kg (75-90%ile) Ht and HC pending

Vitals: T: 98.2 HR: 133 RR: 38 BP: 95/41 O2 Sat: 100% on RA

Range: T 97.8-100.5 HR 117-160 RR 38-50 BP 75-115/37-81 O2 Sat on RA 100%

Gen: Pt looks well developed and nourished. He is vigorous but looks uncomfortable and cries during the exam. It's difficult to calm him down. No acute distress.

HEENT: head symmetrical with soft and flat anterior fontanelles, normocephalic, pupils reactive to light bilaterally, no discharge from eyes, no scleral icterus or conjunctival injection, tympanic membranes without any bulging or erythema bilaterally; no rhinorrhea; nares patent, appropriate ears setting, mucous membrane moist; no oral lesions

Neck: neck is flexible; fully passive range of motion of neck, no lymphadenopathy, no masses, no callus or induration felt on clavicle palpation

CV: normal S1/S2, regular rate and rhythm, no murmurs, no gallops, no rubs, 2+ symmetrical femoral pulses bilaterally, capillary refill <2sec

Lungs: clear to auscultation bilaterally, no decreased air entry, no use of accessory muscles, no nasal flaring, no grunting

Abdominal: non-tender, non-distended, soft, no masses, bowel sounds heard, no HSM, no mass felt in epigastric area nor peristaltic wave, no crying when checking for CVA tenderness

GU/rectal/ Tanner stage: circumcised male external genitalia with bilaterally descended testicles, no hernias, no hyperpigmentation, Tanner stage I, anus patent

Spine: no dimples or hair in sacral area, symmetric straight spine

Skin: no rashes, no lesions, no cyanosis, no bruises, no jaundice absent; no congenital marks present

Neuro: alert, active, turns head when mom talks, Moro, rooting and sucking reflex present.
;Sensation to light touch intact on all extremities and face; holds head upright when pulled to sitting position

Musculoskeletal/extremities: Good muscle bulk and tone; MAES against resistance, warm and well perfused

LABS/IMAGING: July 8th, 2012

Metabolic panel:

Na: 141 K: 5.1 Cl: 103 CO₂: 27 BUN: 9 Cr: 0.3 Glucose: 105
AG: 11 Ca: 0.8
AST: 33 ALT: 28 Alk Phos: 447 Bili, T: 1.8
Protein, T: 6.4 Albumin: 4.4 Osm: 291

Bedside glucose: 119

Hemogram:

WBC: 14.9 H/H: 12.5/36 Plts: 343

Neutro: 24.6 Lymph: 64.9 Mono: 8.6 Eos: 1.1 Baso: 0.8

Urinalysis:

SpGr: 1.010 LE: 25 Nitrite: neg pH: 8 Protein: neg Glucose:
neg Ketones: neg Occult Blood:150

Urine microscopic:

RBC none
WBC 5-10/HPF
Squamous epithelial few
Bacteria none

CSF:

WBC: 4 RBC: 3 Glucose: 62 Protein: 40

Cultures:

RSV: neg
Influenza A/B: neg
Blood, urine, and CSF culture collected at 14:22 July 8th, 2012- negative at 16:59 July 8th

Abdominal Ultrasound: "Impression: Findings of hypertrophic pyloric stenosis. Preliminary report initiated."

Abdominal Xray: "Impression: Gastric distention with fluid level. Presumably this is due to

recent feed. If vomiting is nonbilious and projectile, consider a pyloric ultrasound."

PROBLEM LIST/ASSESSMENT:

1. -fever
2. -non-bilious non-bloody emesis
3. -decreased PO intake and amount of stool/void
4. -findings of pyloric stenosis on abdominal ultrasound
5. -Urine: positive leukocyte esterase and WBC which indicates pyuria
6. -Potassium is 5.1 mmol/L which may seem high. However, for his age 5.1 potassium is normal.
7. -his CO₂ is elevated (27 mmol/L) which can be explained by vomiting for two weeks. Vomiting may lead to metabolic alkalosis because of HCl loss. In the process of making HCl in parietal cell, bicarbonate is released to blood.
8. -Slightly elevated total serum bilirubin- it is thought that level of hepatic glucuronyl transferase that conjugates bilirubin is decreased in patients with pyloric stenosis which may lead to hyperbilirubinemia
9. -alkaline phosphatase is slightly elevated but it is expected in children since their bones are growing faster than in adults and ALP is released by osteoblasts
10. -occult blood in urine was present, however there were no RBCs. The finding may indicate UTI. It may also indicate hemolytic anemia or rhabdomyolysis but it is less likely in our patient.
11. Dehydration- moderate in degree

This is a previously healthy 54-day old male who presents with 2-week history of worsening non-bilious non-projectile vomiting and fever on admission. He was admitted for a rule out sepsis for which a full work up was performed. There is no history or exam findings concerning for serious bacterial infection.

DD:

-for FEVER:

-serious bacterial infection- According to Philadelphia Criteria our patient can be put into low risk category for serious bacterial infection because:

- No more febrile
- WBC <15000/mm³
- UA<10 WBC/hpf
- CSF<8 WBC/mm³
- CSF, urine gram stain negative at the moment

Since serious bacterial infections are present in 6-10% of previously healthy term infants presenting with fever, it has to be considered in every febrile infant, regardless of meningeal or other infection signs. In addition, CSF analysis revealed normal glucose, 3 RBC which were traumatic, normal 40 protein, no bacteria or nitrite on urinalysis, no signs of infection on physical exam (no more fever, no tachypnea, no hypotension, capillary refill was good, no bulging fontanelle, no lethargy)→ serious bacterial infection is unlikely. 1% of infants <2 mo with serious bacterial infection will have fever and infections may present in an atypical way, we cannot exclude it at this point.

UTI- It is the most common cause of SBI in a febrile infant, most commonly caused by E. coli, we need to carefully monitor for urine culture, given that LE, WBC and occult blood were positive. UTI is characterized by dysuria and increased frequency which are difficult to assess in infant. However, mom reported some increased crying and fussiness which may be sign of pain. Additionally, infants with UTI may present with vomiting. It's safe to perform urine culture growth to exclude serious infection.

-GBS and Listeria monocytogenes (late onset neonatal sepsis and meningitis or viral meningitis)- As described above, our patient does not present typical characteristics of infection. Even though mom was GBS+, our patient does not have risk factors for developing GBS sepsis (mom received GBS prophylaxis 4 h before delivery and baby was born at 38 wk). Since signs and symptoms of sepsis can be subtle and nonspecific, I think that at this point we cannot exclude it; we should wait for culture results.

-other bacterial diseases:

-acute otitis media: Acute otitis media is commonly caused by Streptococcus pneumoniae, nontypeable Haemophilus influenzae, and Moraxella catarrhalis. Tympanic membranes did not have any abnormalities and mom did not notice any ear tugging.

-pneumonia- traditional findings include fever, cough and tachypnea/toxicity (absent in our patient). Since there are no examination findings seen frequently in pneumonia (such as grunting, nasal flaring, retractions, decreased breath sounds and cyanosis) this diagnosis is less possible. However, bacterial pneumonia is possible in an ill-appearing infant with a fever for several days—even in the absence of respiratory symptoms or abnormal pulmonary findings. Our patient does not appear ill.

-viral URI: the most common implicated virus is rhinovirus, so negative RSV and influenza nasal swab does not contradict this diagnosis. However, pt does not have any congestion, rhinorrhea or cough and he didn't have any sick contacts.

-for VOMITING

-Pyloric stenosis

Our patient presented with non-bilious emesis post feeds, increased bicarbonate and slightly elevated bilirubin which supports diagnosis of pyloric stenosis. His vomiting was not projectile but it is important to remember that projectile vomiting is present in about 91% of patients with pyloric stenosis. It is characterized by hypertrophy of pyloric smooth muscle which may lead to obstruction of gastric outlet (which was visible on abdominal ultrasound and x-ray). Pyloric stenosis is more common in 2-5 week old males- a profile that fits our patient. Even though he did not have an epigastric "olive" on exam (which is present in 92% of patients), did not present with dehydration or weight loss (which is common in these patients)- the rest of the patient's presentation matches the diagnosis.

-Gastroesophageal reflux

It is characterized by reflux of stomach content into esophagus. Possible symptoms such as

poor appetite, cough, wheezing were not present. Abdominal US showed hypertrophy of the pylorus which makes pyloric stenosis our leading diagnosis.

-Gastroenteritis

Bacterial and viral infections usually don't last more than 5 days. Duration of parasitic infections is often more than 2 weeks but are less likely given that pt did not have any sick contacts or recent travel. Baby is only fed by formula and does not have diarrhea. For these reasons gastroenteritis is less likely.

-Malrotation and volvulus

Bilious emesis is hallmark of this disease. Our patient's emesis was non-bilious. Abnormal position of the bowel can lead to bowel obstruction, ischemia and tissue death- it is a medical emergency. Abdominal pain and vomiting are usually sudden which was not the case with our patient was.

-Increased Intracranial Pressure

as seen with congenital hydrocephalus- may have normal fontanelles as skull expands gradually over time

-UTI

Common cause of emesis without diarrhea in infants and is common cause of infection in uncircumcised as well as circumcised males of this age

PLAN

Patient will be sent OR in the morning for pyloromyotomy per surgery.

FEN/GI:

- surgery consulted for probable pyloric stenosis, will follow recommendations. Remain NPO except for meds overnight with possible surgery in the morning
- on IVF, managed by surgery D5NS at 40 ml/hr
- closely follow urine output; if less than 1 ml/kg/hour will bolus with NS
- repeat BMP if vomiting is worsening
- do not remove NG tube until surgery
- surgery to get informed consent

ID:

- monitor fever curve and other signs of infection such as change in behavior, lethargy, decreased feeding
- Will continue with Rocephin 500mg q24hrs until final cultures after 48h are negative
 - If cultures become positive, adjust treatment according to organism susceptibility
- Tylenol 90 mg po q4 hours PRN for fever >100.5
- Follow-up blood, urine, CSF culture

CV/Resp:

- monitor vitals as per floor protocol

NEURO:

-check head circumference and plot to lower suspicion for hydrocephalus

SOCIAL:

-SW to stop by to provide support for this mother
-mom provided with handout and discussion of pyloric stenosis
-all maternal question entertained and answered

HEALTH MAINTENANCE:

-Schedule follow-up with a PCP for regular health maintenance and 2-month immunization
-Consider adding vitamin D supplement 400 IU/day if amount of formula does not exceed 32oz/day

Patient can be discharged one or two days after surgery:

-if cultures remain negative after 48h, patient stays afebrile and there are no signs of infection
AND
-there are no complications after surgery and the wound is healing well AND
-pt has appropriate urine output and passes normal stool AND
-pt can tolerate oral formula feeding 3.5oz every 2-3h without any vomiting.

Peds Student UCF MS3

H&P Writer's Workshop

Faculty Packet

2018-2019

Adapted from Debra Bynum MD, Cristin Colford MD, David McNeely MD
University of North Carolina at Chapel Hill, North Carolina

H&P Writer's Workshop: Teaching Preclinical Medical Students the Art of the Patient "Write-up"

Adapted from Debra Bynum MD, Cristin Colford MD, David McNeely MD. University of North Carolina at Chapel Hill, North Carolina

Instructor's Guide

Objectives for this session:

1. To teach medical students how to create an organized, thorough and thoughtful patient write-up
2. To use a standardized rubric to provide specific feedback to students and more uniform assessment of student write-ups

Learning Outcomes for students:

At the end of this activity, students will be able to:

1. Demonstrate knowledge of the components and structure of a thorough, organized clinical note
2. Apply the principles of structure and components of a written note to demonstrate clinical reasoning and understanding
3. Write a comprehensive note based upon a standardized clinical encounter

Documenting the full History and Physical Examination in the format of a write-up is a core component of clinical rotations. Most students and faculty feel that despite the time and effort required, this exercise is essential to the clinical learning experience. The process helps the student organize thoughts and develop a differential and plan. The final product can be a useful tool in the assessment of a student's ability to not only gather, but also to interpret and synthesize data. Finally, the ability to communicate and document a clinical encounter is not only a key skill that all medical students must have³ but also a Core Entrustable Professional Activity for entering residency according to a recent position statement by the Association of American Medical Colleges (AAMC).⁴

Most pre-clinical students struggle to write a clinical note. The complexity of the encounter is often confusing and interferes with the student's ability to understand the basic components of a thoughtful, thorough, and organized note. Given this observation and evidence that student notes can be improved with frequent and high-quality feedback, we will use a set of educational tools that would aid in the teaching and assessment of this important skill.

This writer's workshop utilizes a videotaped encounter with a standardized physician and standardized patient. The videotaped encounter is less than 15 minutes in length, includes enough information to create a complete note, and focuses on a single chief complaint that is straightforward, yet conducive to the development of a differential. Using a *Guide* and a *Grading Rubric*, a sample comprehensive write-up based upon this standardized encounter was created. This sample is then available as a reference for students and faculty.

Description of Activity:

Prior to the workshop, students create an H&P write-up based upon a standardized, videotaped encounter. Students bring their H&Ps for peer review in a small group session led by their portfolio advisor. Students and faculty use a guide to the write-up and a grading rubric to assess and give feedback to each other's write-up, discuss the components and structure of a high-quality note as a group, and review a sample note as reference. Given the fact that all of the student notes and the sample note are based upon the same standardized encounter, the focus of the session is placed on the "how to" of the write-up process.

IMPORTANT: By the end of the workshop students should have received peer feedback on their video-based H&P using the grading rubric, and be able to submit BOTH documents (the H&P and completed rubric) to their portfolio as required assignments.

List of resources:

1. Writer's Workshop Instructor's Guide (this document)
2. [Guide to the Comprehensive Adult Write-up/Note](#)
3. [Grading Rubric for comprehensive write-up](#)
4. [Writer's Workshop Video of standardized patient encounter](#)
5. [Sample write-up from standardized video encounter](#) (available to students close to the end of the workshop)

Activity Guide:

1. Students will be provided curricular time to meet with their advisors on campus. If this is not be possible, one student from the group needs to contact the advisor to set up a meeting date/time when all group members and advisor be present.
2. Individual preparation required for students to complete before this session:
 - a. Review the [Guide to the Comprehensive Adult Write-up](#)
 - b. Review the [Grading Rubric for the comprehensive adult write-up](#)
 - c. Watch the [standardized clinical encounter video](#)
 - d. Create a full write-up based upon the videotaped encounter and prepare to bring this draft to the small group session.
3. Individual preparation required for faculty leaders to complete before small group meeting:
 - a. Review this Instructor's Guide for a better understanding of the background and process involved in this session
 - b. Review the [Guide to the Comprehensive Adult Write-up](#)
 - c. Review the [Grading Rubric for the comprehensive adult write-up](#)
 - d. Watch the [standardized clinical encounter video](#) with direct link here:
<https://tinyurl.com/WritersWorkshopVideo>
4. **Small group session --Groups with 5-7 students and one faculty leader meet (2 hours):**
 - a. Faculty leader reviews the background and introduces the session
 - b. Faculty provides overview of H&P write-up structure and expected depth of each component

- c. Faculty highlights grading rubric categories and the relative weight of each category, particularly the clinical reasoning portion (50%)
 - d. Students trade write-ups and use the guide and grading rubric to provide peer feedback to each other
 - e. Faculty leader gives feedback, reviews sample write-up, addresses questions, leads discussion.
5. Closing the session:
- a. The highlighted [sample reference H&P write-up](#) for the video encounter is distributed to students for future reference.
 - b. Students leave the session with their individual H&P and completed graded rubric for submission **of both** as required via LiveText.

References:

1. McLeod PJ. Assessing the value of student case write-ups and write-up evaluations. *Academic medicine : journal of the Association of American Medical Colleges*. May 1989;64(5):273-274.
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7. Kogan JR, Shea JA. Psychometric characteristics of a write-up assessment form in a medicine core clerkship. *Teaching and learning in medicine*. Spring 2005;17(2):101-106.
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Portfolio Advisor-Students Face-to-Face Group Meeting Checklist

Dedicate the first 15-20 minutes to introductions and setting expectations:

- Share each other's backgrounds and interests (recommended ice breaker).
- Review the COP e-portfolio expectations from both sides, specifically:
 - **Student(s):**
 - Submit every H&P on time by the due date set.
 - Notify their advisor via email that their H&P has been submitted for review.
 - Be proactive when the need arises to communicate with their advisor.
 - **Advisor:**
 - Expect an email notification from either the student or COP Coordinator that an H&P has been submitted for review.
 - Provide detailed constructive feedback within two (2) weeks from the notification received.
 - Feel free to provide formative feedback on any other section of students' e-portfolio, if s/he sees the need.
- Discuss the type of feedback student(s) will receive and its formative nature.
- Exchange contact information.
- Decide on preferred means of communication outside of LiveText®, preferred hours, and deadlines.

The remainder 100-105 minutes should be dedicated to the H&P Writer's Workshop activity:

- Review Guide to H&P and Rubric
- Peer H&P assessment and completion of rubric
- Review of sample reference H&P Write-up and group discussion
- Consider the option of meeting again later in the academic year individually or as a group.

IMPORTANT: By the end of the workshop students should have received peer feedback on their video-based H&P using the grading rubric, and be able to submit BOTH documents (the H&P and completed rubric) to their portfolio as required assignments.

Guide to the Comprehensive Adult H&P Write Up

(Adapted from D Bynum MD, C Colford MD, D McNeely MD, University of North Carolina at Chapel Hill, North Carolina)

Chief Complaint	Include the primary symptom causing the patient to seek care. Ideally, this should be in the patient's words.
Source & Reliability	If the patient is not the source of the information state who is and if the patient is not considered reliable explain why (e.g., "somnolent" or "intoxicated")
History of Present Illness	<p>First sentence should include patient's identifying data, including age, gender, (and race if clinically relevant), and pertinent past medical history</p> <p>Describe how chief complaint developed in a chronologic and organized manner</p> <p>Address why the patient is seeking attention at this time</p> <p>Include the dimensions of the chief complaint, including location, quality or character, quantity or severity, timing (onset, duration and frequency), setting in which symptoms occur, aggravating and alleviating factors and associated symptoms</p> <p>Include the patient's thoughts and feelings about the illness</p> <p>Incorporate elements of the PMH, FH and SH relevant to the patient's story.</p> <p>Include pertinent positives and negative based on relevant portions of the ROS. If included in the HPI these elements should not be repeated in the ROS</p> <p>The HPI should present the context for the differential diagnosis in the assessment section</p>
Past Medical History	<p>Describe medical conditions with additional details such as date of onset, associated hospitalizations, complications and if relevant, treatments</p> <p>Surgical history with dates, indications and types of operations</p> <p>OB/Gyn history with obstetric history (G,P - number of pregnancies, number of live births, number of living children), menstrual history, birth control</p> <p>Psychiatric history with dates, diagnoses, hospitalizations and treatments</p> <p>Age-appropriate health maintenance (e.g., pap smears, mammograms, cholesterol testing, colon cancer) and immunizations</p> <p>Describe any significant childhood illnesses</p>
Medications	<p>For each medication include dose, route, frequency and generic name</p> <p>Include over the counter medications and supplements; include dose, route and frequency</p>

	Do not use abbreviations
Allergies	Describe the nature of the adverse reaction
Family history	Comment on the health state or cause of death of parents, siblings, children Record the presence of diseases that run in the family (e.g., HTN, CAD, CVA, DM, cancer, alcohol addiction)
Social history	Include occupation, highest level of education, home situation and significant others Quantify any tobacco, alcohol or other drug use Include relevant sexual history Note any safety concerns by the patient (domestic violence, neglect) Note presence of advance directives (e.g., living will and/or health care power of attorney) Assess the patient’s functional status – ability to complete the activities of daily living Consider documentation of any important life experience such as military service, religious affiliation and spiritual beliefs
Review of Systems	Include patient’s Yes or No responses to all questions asked by system Note “Refer to HPI” if question responses are documented in the HPI <u>Review of Systems:</u> <i>Include in a bulleted format the pertinent review of systems questions that you asked. Below is an example of thorough list. In a focused history and physical, this exhaustive list needn’t be included.</i> <i>skin bruising, discoloration, pruritus, birthmarks, moles, ulcers, decubiti, changes in the hair or nails, sun exposure and protection.</i> <i>hematopoietic spontaneous or excessive bleeding, fatigue, enlarged or tender lymph nodes, pallor, history of anemia.</i> <i>head and face pain, traumatic injury, ptosis.</i> <i>ears tinnitus, change in hearing, running or discharge from the ears, deafness, dizziness.</i> <i>eyes change in vision, pain, inflammation, infections, double vision, scotomata, blurring, tearing.</i> <i>mouth and throat dental problems, hoarseness, dysphagia, bleeding gums, sore throat, ulcers or sores in the mouth.</i>

	<p>nose and sinuses discharge, epistaxis, sinus pain, obstruction.</p> <p>breasts pain, change in contour or skin color, lumps, discharge from the nipple.</p> <p>respiratory tract cough, sputum, change in sputum, night sweats, nocturnal dyspnea, wheezing.</p> <p>cardiovascular system chest pain, dyspnea, palpitations, weakness, intolerance of exercise, varicosities, swelling of extremities, known murmur, hypertension, asystole.</p> <p>gastrointestinal system nausea, vomiting, diarrhea, constipation, quality of appetite, change in appetite, dysphagia, gas, heartburn, melena, change in bowel habits, use of laxatives or other drugs to alter the function of the gastrointestinal tract.</p> <p>urinary tract dysuria, change in color of urine, change in frequency of urination, pain with urgency, incontinence, edema, retention, nocturia.</p> <p>genital tract (female) menstrual history, obstetric history, contraceptive use, discharge, pain or discomfort, pruritus, history of venereal disease, sexual history.</p> <p>genital tract (male) penile discharge, pain or discomfort, pruritus, skin lesions, hematuria, history of venereal disease, sexual history.</p> <p>skeletal system heat; redness; swelling; limitation of function; deformity; crepitation: pain in a joint or an extremity, the neck, or the back, especially with movement.</p> <p>nervous system dizziness, tremor, ataxia, difficulty in speaking, change in speech, paresthesia, loss of sensation, seizures, syncope, changes in memory.</p> <p>endocrine system tremor, palpitations, intolerance of heat or cold, polyuria, polydipsia, polyphagia, diaphoresis, exophthalmos, goiter.</p> <p>psychologic status nervousness, instability, depression, phobia, sexual disturbances, criminal behavior, insomnia, night terrors, mania, memory loss, perseveration, disorientation</p>
<p>Physical examination</p>	<p><u>Describe what you see, avoid vague descriptions such as “normal”; The PE that relates to the chief complaint may need to be MORE detailed than the sample below; record any “advanced” findings/lack of findings that are pertinent (for example, presence or absence of egophany, shifting dullness, HJR)</u></p> <p>Physical Examination:</p> <p>Always begin with the vital signs. These should include;</p> <p style="padding-left: 40px;">Temperature</p> <p style="padding-left: 40px;">Pulse</p> <p style="padding-left: 40px;">Blood pressure</p>

	<p style="text-align: center;">Respiratory rate</p> <p style="text-align: center;">Pain (10 point scale rating)</p> <p>Pulse oximetry when available: include the percentage of supplemental O2. If room air, document this.</p> <p><i>EXAMPLE:</i></p> <p><i>O2 Saturation: 88% on room air, 95% on 2 liter nasal canula.</i></p> <p>General appearance: include information on the patient's overall condition. It is appropriate to comment on level of comfort or distress, as well as general grooming and hygiene.</p> <p>Example:</p> <ul style="list-style-type: none">• Mr. Smith is a well appearing elderly gentleman in no acute distress.• Mr. Smith is a frail appearing elderly gentleman in significant respiratory distress at the time of examination. <p>Next should follow the individual body systems in discreet subheadings.</p> <p>Traditionally, systems are listed in a top down fashion when performing a full physical examination. This may vary in subspecialty examinations such as ophthalmology or orthopedics.</p> <p>In general, the format should be as follows</p> <p>HEENT:</p> <p>Neck:</p> <p>Heart:</p> <p>Lungs:</p> <p>Abdomen:</p> <p>Exteremities:</p> <p>Neurological:</p> <p>MSK</p> <p>Vascular:</p> <p>Skin:</p> <p>Example:</p>
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	<p>HEENT:</p> <p>Head: no evidence of trauma</p> <p>Nares: normal pink mucosa, no discharge</p> <p>Eyes: no scleral icterus, normal conjunctiva</p> <p>Ears: TM's show normal light reflex, no erythema, normal landmarks</p> <p>OP: moist mucus membranes; OP with no erythema or exudate. Oral exam with no lesions.</p> <p>Neck: Supple, No thyromegaly, no lymphadenopathy, normal range of motion; JVP estimated to be 7 cm.</p> <p>Heart: PMI nondisplaced and normal size; No thrills or heaves; RRR, S1S2 with no s3 or s4, no murmurs, rubs or gallops</p> <p>Lungs: No increase work of breathing, lungs clear to auscultation, no wheezes or crackles</p> <p>Abdomen: Non distended, no scars, normoactive bowel sounds, no bruits, non-tender to palpation, no hepatosplenomegaly, no masses</p> <p>Exteremities: No clubbing, cyanosis or edema;</p> <p>Vascular: pulses are 2+ bilaterally at carotid, radial, femoral, dorsalis pedis and posterior tibial; no bruits</p> <p>Neuro: alert and oriented x 3 (person, place and time), CN II-XII intact; Motor 5/5 in all extremities. Reflexes 3+ and equal throughout. Sensory testing normal to light touch, pinprick, proprioception, and vibration. Finger-nose and Heel to shin/point to point testing normal. Rapid alternating movements normal; Gait: normal get up and go, normal heel-toe and tandem gait</p> <p>MSK: good tone throughout, no swelling/synovitis or limitation of flexion at any joint</p> <p>Skin: normal texture, normal turgor, warm, dry, no rash</p>
<p>Data collection</p>	<p>Include lab and radiological data appropriate for the HPI (include YOUR interpretation, not just copy/paste from medical record report)</p> <p>Labs:</p> <p>Chest xray or other xrays/scans</p> <p>EKG:</p>

<p>Problem List</p>	<p>List all problems, most important first; You will use this to then begin to combine/lump problems to then create your Assessment/Plan by problem list</p> <p>For example:</p> <p>Problem list:</p> <p>Chest pain</p> <p>Fever</p> <p>Shortness of breath</p> <p>Hemoptysis</p> <p>Elevated creatinine</p>
<p>Summary Statement</p>	<p>Label as summary (<i>" In summary...."</i>)</p> <p>Include 1-2 sentence impression restating basic identifying information (<i>The patient is a 45 year old male</i>),</p> <p>Most pertinent information related to the medical/family/social history (<i>with a history of tobacco use and family history of early CAD</i>),</p> <p>Expanded chief complaint and most pertinent review of systems on presentation (<i>who presents with substernal chest pressure, nausea and diaphoresis</i>)</p> <p>Most important findings on physical, labs, data (<i>and is found to have an S4, bilateral rales, and JVD on exam with evidence of pulmonary edema on CXR</i>)</p> <p>Pertinent information is that which contributes directly to building the case for your differential diagnosis....</p> <p><i><u>In summary, the patient is a 45 year old male with a history of tobacco use and family history of early CAD who presents with substernal chest pressure, nausea and diaphoresis and is found to have an S4, bilateral rales, and JVD on exam with evidence of pulmonary edema on CXR...</u></i></p> <p><i>Key phrases and structure for summary statement:</i></p> <p><i>In summary, this is a ...</i></p> <p><i>With a history of...</i></p> <p><i>Who presents with....</i></p> <p><i>And is found to have...</i></p>
<p>Assessment/Plan</p>	<p><u>Organize plan by problem: Label, Assessment/Plan by problem list</u></p>

Include at least 3 diagnoses for your differential potentially associated with the patient's chief complaint

Include the Most Likely diagnosis/diagnoses on your differential

Include the DO NOT MISS diagnoses on your differential

Order your differential to reflect most likely diagnoses or most serious diagnoses first

For each diagnosis discuss physiologic disease basis relevant to the patient and elements from the patient's history and physical that either support or refute the diagnosis. For each item on your differential, explain what makes it likely AND what makes it less likely.

It is OK to include less likely items on your differential – explain why it is important to consider but less likely the diagnosis (*PE may be considered frequently when a patient presents with shortness of breath and should be on the differential because it is a Do Not Miss diagnosis – but if the patient has a high white count, cough with sputum and infiltrate on exam, it is LESS likely*)

For each problem, discuss the diagnostic plan, treatment plan and patient education.

Outline of what this should look like...

Summary Statement...

A/P by Problem List:

4. **Problem # 1:**
Differential Dx includes.... List at least 3 items for your differential, explain what is most likely and why, what is a must not miss, and what is less likely and why....
Diagnostic Plan will be...
Treatment plan will include...

Patient education.... Instructions to patient include...

5. **Problem # 2:**
Differential....
Diagnostic Plan...
Treatment plan...

Patient education

6. **Problem # 3:**
Differential...
Diagnostic plan...
Treatment plan...
Patient education...

For the main problem(s) identified in your problem list, you are expected to identify a **topic or clinical question** that would help you advance your

	<p>knowledge in that specific area to help you provide better care of patients presenting in a similar way in the future. The topic or clinical question can focus on an epidemiologic, diagnostic, therapeutic, pharmacologic, etc. aspect of patient care.</p> <p>In order to review the topic/answer your question, you should: 1) perform a literature or textbook review to answer your clinical question, 2) incorporate your findings into the assessment and plan of your write-up in the form of 1-2 paragraphs and 3) list the resources used.</p> <p>COM Library resources are strongly encouraged, for suitable resources based on topic of interest please see P2 LibGuide.</p>
Format	<p>Goal is a concise write up with your thought processes documented in logical and organized manner</p> <p>Avoid spelling or grammatical errors</p> <p>Use only commonly accepted abbreviations</p>
HIPAA	<p>Remove patient identification from write up (e.g., name, address, medical record number)</p>

Sample Write-Up for Writer's Workshop

Chief Complaint: “My legs are swollen and I can’t breathe” *chief complaint in patient’s own words, no other demographics or history*

HPI: The patient is a 58 year-old female with a history of high blood pressure and high cholesterol who comes to the clinic with a 6-week history of leg swelling and difficulty breathing. *opening sentence that includes most pertinent past history and presenting symptoms* These symptoms have been progressing. She has noticed that she now gets short of breath when walking short distances such as getting up from a chair to the bathroom. She can no longer walk to her mailbox without becoming short of breath and stopping to rest. She has been waking up at night gasping for air, and has been sleeping propped up on 4 pillows because she gets short of breath when she lies down flat. She has a cough that is productive of clear phlegm. *Story of the illness and symptoms, and pertinent positive symptoms/ROS* She has not had any fevers or chills. She denies chest or leg pain. She has had no sick contacts. She has gained 15 pounds in the past two months. She has no abdominal pain but feels full after eating a small amount. *Pertinent positive AND negative ROS based upon your working differential diagnosis; can also include pertinent family history (you could include the family history of heart disease) and pertinent social history (her prior smoking history)*

Past Medical History:

1. Hypertension
2. High cholesterol

Allergies: NKDA

Medications:

Aspirin 81mg by mouth daily

Hydrochlorothiazide 25mg daily (note for patient--blood pressure/diuretic)

Lisinopril 20mg daily (blood pressure)

Simvastatin 40mg daily (cholesterol)

Family History: Hypertension and high cholesterol

Social History: She lives with her husband, who has had to do more of the housework including cleaning and cooking due to her shortness of breath. She did smoke 1 pack of cigarettes daily for 30 years, but quit 20 years ago. She drinks occasional alcohol, but no

more than 1 glass of wine a month. No illicit drug use. She and her husband do not like to cook. They often eat out or prepare frozen meals and soups. She does not get much regular physical activity but is much more limited over the last few weeks.

Review of Systems:

Gen: Positive weight gain, fatigue. No fevers, night sweats

HEENT: No headaches, vision changes.

CV: As per HPI, positive for shortness of breath, orthopnea, LE edema. No chest pain or palpitations

Pulmonary: Cough productive of clear sputum. No wheezing. Positive for orthopnea, dyspnea on exertion.

GI: No abdominal pain, nausea, vomiting, diarrhea or constipation. Mild feeling of distension in stomach and feels full easily.

Psych: No depression, but feeling down that she is not able to be as active as she had been previously.

Endo: No heat or cold intolerance, no polyuria or polydipsia.

MSK: No joint pains or swelling.

Neuro: Mild dizziness when she gets winded. No weakness, numbness. No headaches.

Heme: No bruising or bleeding.

Physical Exam:

Vital Signs: Temp 98 F, pulse 75, Resp Rate 20, Blood Pressure 130/95

Gen: Appears tired but in no acute distress, breathing comfortably

HEENT: No trauma. TM clear. moist mucous membranes, Oropharynx with no exudates or thrush

Neck: JVP measures 12cm, no cervical lymphadenopathy, no thyromegaly

Lungs: Crackles in bottom third of lung fields bilaterally. No wheezing

CV: Displaced PMI, RRR, no murmurs. Normal S1 and S2. Positive S3 gallop.

Abd: Normal bowel sounds. No bruits. Soft, no tenderness to palpation. Normal liver span. No splenomegaly.

Ext: warm and well perfused. 2+ pitting edema to knees bilaterally

Skin: no rashes, redness, or warmth

Labs/chest xray: pending

Problem List: *includes problems from history, past history, physical exam, labs*

1. shortness of breath
2. orthopnea
3. PND
4. Bilateral edema
5. HTN
6. Hyperlipidemia
7. Prior tobacco use
8. Cough with clear phlegm
9. Family history of heart disease (not early onset)
10. Weight gain
11. S3 on exam
12. Bilateral crackles on exam
13. Bilateral edema on exam
14. JVD

Summary statement:

In summary, this is a 58 year old woman with a history of HTN and hyperlipidemia who presents with progressive SOB, orthopnea, and PND and is found to have elevated JVD, s3, basilar crackles and bilateral edema on exam. *Summary statement - unlike opening sentence, summary statement should also include really pertinent findings from the history, PE and labs/data*

Consider this format for summary statement:

1. ***Basic demographic, advertise the summary statement (In summary, this is a 62 year old woman...)***
2. ***Most pertinent history related to your differential (with a history of HTN and hyperlipidemia...)***

3. **List most pertinent presenting chief complaint and other ROS (who presents with progressive SOB, orthopnea, and PND...)**
4. **List pertinent PE, lab, data findings (and is found to have elevated JVD, an S3, basilar crackles and bilateral lower extremity edema on exam)**

In summary, this is a

With a history of ...

Who presents with...

And is found to have...

A/P by problem(s) or symptom(s): You can “lump” problems together that have the same differential (for example, shortness of breath, PND, orthopnea and edema go together for a differential that includes heart failure); Not every item on the problem list you have created above is necessarily included as a separate problem in the assessment/plan section.

Problem/symptom(s) # 1 should include what the patient presents with (the chief complaint) OR symptoms related to a must not miss/could be lethal diagnosis.

1. SOB/orthopnea/PND/edema **(ok to group symptoms together if they “fit”):** Given the constellation of symptoms and the physical exam findings of elevated JVP, bilateral crackles, S3 and bilateral edema, Congestive heart failure is the most likely on the differential diagnosis. Other less likely processes to consider would be pulmonary embolism with DVTs, pneumonia, interstitial lung disease, and pulmonary HTN. PE and DVTs could cause peripheral edema and shortness of breath, and occasionally can be associated with elevations of JVP if there is associated right heart failure, but this would not explain the s3 and crackles on exam and is much less likely with bilateral lower extremity edema. Pneumonia might explain the crackles on exam, but the time course and history do not suggest an infectious etiology and this would not explain the edema. Interstitial lung disease could explain the lung findings, and could be associated with pulmonary HTN and therefore elevation of JVP and bilateral edema due to right sided heart failure, but would not explain the PND, orthopnea and s3 which are more indicative of left sided heart failure. Anemia might explain the shortness of breath but not the other symptoms. Hyperthyroidism can also be associated with high output heart failure, but the history otherwise is not consistent. Renal and liver failure can be associated with shortness of breath, weight gain, and edema, but again should not present with signs of left sided heart failure. **(differential diagnosis and clinical reasoning—include at least 3 items on your differential, and describe what you think is the most likely and**

why, and what is less likely and why; remember to clearly state any DO NOT MISS Diagnoses, and explain why they may be more or less likely...

Given the fact that congestive heart failure, with left ventricular involvement, is most likely on the differential diagnosis, she will need a transthoracic echocardiogram to more fully evaluate her cardiac function. Given the differential that includes anemia and renal failure, will also check basic labs including a chemistry panel and CBC as well as a TSH to rule out hyperthyroidism. Could consider checking a BNP as well. Given the crackles on exam and differential that includes ILD, will check a chest xray. PE and DVTs are less likely so will hold on checking d-dimer, dopplers or CT angiogram at this point. **Work up plan**

Once basic labs are reviewed, would continue lisinopril for afterload reduction, and add a diuretic such as furosemide given evidence of volume overload on exam. Although HCTZ is a diuretic, it is not as potent as furosemide. Stop HCTZ if treating with furosemide. Will need to follow K once starting this. Further management will depend upon results from the echocardiogram, but may need further evaluation for underlying ischemic heart disease with cardiology if LV ejection fraction is depressed. Will also need BP control, especially if there is evidence for diastolic dysfunction. **Treatment plan**

In addition, the patient will need counseling and education for congestive heart failure if this is the diagnosis. Careful daily weights and monitoring, and adjusting diet to include less salt (especially with her current diet that includes processed foods) will be important **(Patient education)**

Keep to the outline/format – differential diagnosis with clinical reasoning, work up plan, treatment plan, patient education

2. HTN: Given the likelihood of CHF, will need tighter blood pressure control. Will need to hold HCTZ if treating with furosemide. May need additional agent such as beta blocker or spironolactone depending upon results of cardiac echo.
3. Hyperlipidemia: continue current statin, check lipids and LFTs.

History and Physical Write-up Assessment Rubric 2018-19

Complete this rubric by choosing the descriptor that best describes each category for the H&P reviewed.

	Component of Write-up	Incomplete (0)	Developing I (0.4)	Developing II (0.6)	Developing III (0.8)	Advanced (1.0)	
Subjective	Chief Complaint 0-2 points	None [0 points]		Present		Includes patient's main complaint, in patient's words, and no additional information/patient information/other non-pertinent wording [2 points]	
	Opening Sentence 0-5 points	None [0 point]		present but lacks appropriate important information, or includes information that is not important to the differential		includes appropriate history and not distractors [5 points]	
	HPI (0-10 points, 2 for each component below)						
	HPI Organization	Not organized		Partially organized		Well organized	
	HPI Thoroughness	Not thorough		Partially thorough		Very thorough	
	HPI Includes pertinent positive ROS	Does not include pertinent positive ROS		Includes some pertinent positive ROS		Includes most pertinent positive ROS	
	HPI Includes pertinent negative ROS	Does not include pertinent negative ROS		Includes some pertinent negative ROS		Includes most pertinent negative ROS	
	HPI Includes pertinent past history/ family history/social history	Does not include pertinent past history/ family history/social history		Includes some pertinent past history/ family history/social history		Includes most pertinent past history/ family history/social history	
	PMH 0- 2 points	None [0 points]		Disorganized, incomplete, paragraph format		Organized, thorough, bulleted format (includes surgical history, ob/gyn history if appropriate, vaccinations & developmental history if a child) [2 points]	
	Medications 0-2 points	nothing written (if no medications, must state so) [0 point]		medications listed but uses abbreviations, trade names		Medications listed, no abbreviations, generic names, or no meds listed as "no medications" [2 points]	
	Allergies 0-2 points	Nothing listed (if no allergies, must indicate such) [0 point]		Allergies listed but not reactions		Allergies and reactions listed, or no allergies listed as "no known drug allergies" [2 points]	
	Social History 0-1 points <i>Point system does NOT reflect a lack of importance to this!!!</i>	None [0 point]		Includes some but not all of alcohol, tobacco, drug use, living situation/social support		Includes alcohol, tobacco, drug use and living situation/social support [1 points]	
	Family History 0-1 points <i>Point system does NOT reflect lack of importance</i>	None [0 point]		Includes partial family history		Includes family history [1 points]	

	ROS 0- 5 points General; Skin; HEENT; Respiratory; Cardiac; GI; GU; GYN; Musculoskeletal; Vascular; Neurological; Psychiatric; Endocrine; Hematologic.	None [0 points]		Lists only a few, not organized, includes PE or other findings, repeats information already described in HPI		Thorough, excludes information written in HPI with “as in HPI” references, does not include any PE findings in ROS [5 points]
Objective	Physical Examination 0-10 points Vital Signs, General Appearance, Skin, HEENT, CV, Respiratory, GI, GU, Musculoskeletal, Neurologic, Psychiatric	None [0 points]		Incomplete, Unorganized		Includes vitals, organized in appropriate order, thorough [10 points]
Summary	Summary Statement 0-10 points	None [0 points]		Present but unorganized, does not include pertinent information or includes information that is not pertinent or incorrect		Organized, includes pertinent HPI, PE and data leading to differential diagnosis [10 points]
TOTAL FOR ABOVE: 50 POINTS						
Assessment and Plan	Problem List 0- 5 points	None listed [0 points]		Present but incomplete		Organized, thorough, complete; includes chief complaint [5 points]
	Differential diagnosis 0-20 points	None [0 points]		Less than 3 items on differential		At least 3 items on the differential, includes the cc as a problem for clinical reasoning [20 points]
	Clinical Reasoning 0- 25 points	None [0 points]	Minimal reasoning, does not list most likely diagnosis or “must not miss” diagnosis	More thorough, but not organized into “differential, work up, treatment”	Thorough and organized, works through differential, describes why and why not diagnoses should be considered, includes most likely diagnosis (and describes this), includes “must not miss” diagnoses when appropriate; organized into “differential, work up, treatment plan” format	Differential and clinical reasoning “wows”; reasoning is advanced; [25 points]
TOTAL FOR ABOVE: 50 POINTS						